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INTELLECTUAL PROPERTY PIRACY: ARE WE DOING ENOUGH TO PROTECT U.S. INNOVATION ABROAD?

HEARING

BEFORE THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTH CONGRESS

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INTELLECTUAL PROPERTY PIRACY: ARE WE DOING ENOUGH TO PROTECT U.S. INNOVATION ABROAD?

THURSDAY, SEPTEMBER 23, 2004

HOUSE OF REPRESENTATIVES,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The Committee met, pursuant to notice, at 11 a.m., in room 2154, Rayburn House Office Building, Hon. Tom Davis (chairman of the committee) presiding.

Present: Representatives Davis, Blackburn, Waxman, Maloney, Cummings, Clay, Watson, Sanchez, Ruppersberger, Norton, and Cooper.

Staff present: David Marin, deputy staff director/communications director; Keith Ausbrook, chief counsel; Ellen Brown, legislative director and senior policy counsel; Jennifer Safavian, chief counsel for oversight and investigations; Jack Callender, John Hunter, and David Young, counsels; Rob White, press secretary; Drew Crockett, deputy director of communications; John Cuaderes and Victoria Proctor, senior professional staff members; Jaime Hjort, professional staff member; Sarah D'Orsie, deputy clerk; Allyson Blandford, office manager; Corinne Zaccagnini, chief information officer; Phil Barnett, minority staff director; Karen Lightfoot, minority communications director/senior policy advisor; Anna Laitin, minority communications & policy assistant; Michelle Ash, minority senior legislative counsel; Nancy Scola, minority professional staff member; Earley Green, minority chief clerk; Jean Gosa, minority assistant clerk; and Cecelia Morton, minority office manager.

Chairman TOM DAVIS. The committee will come to order. A quorum being present, the Committee on Government Reform is now in order.

I would like to welcome everybody to today's hearing on intellectual property rights and the effectiveness of our efforts to protect U.S. interests from privacy abroad. The committee will focus on counterfeiting and piracy in foreign countries of software, movies, music, and designs for consumer industrial products that are protected by U.S. intellectual property laws.

Everybody knows that the United States is the greatest source of creativity in the world. Our products, whether they are movies, music recordings, design of clothing, ship and airplane parts, fast food, or computer software, can be found in every market in almost every country in the world. If markets for U.S. goods derived from intellectual property are to be sustained and expanded, our prod-

ucts must be adequately protected in every market where they are found; otherwise, jobs will be lost, not only the jobs of executives or movie stars or recording artists, but also the technicians, the carpenters, the factory workers, and the retailers.

Moreover, consumer safety will also be in jeopardy if we get knock-off goods such as airplane, ship or auto parts, or consumer products get into the mainstream of commerce and fail to perform as expected. Incentives to stimulate and encourage innovation will also be diminished, as capital necessary to foster this creativity will be lost to illegitimate interests.

Counterfeiting and piracy of U.S. intellectual property in foreign countries is rampant. Counterfeited editions of U.S. software, movies, music, and designs for consumer and industrial products can be found in markets throughout the world. I know because I witnessed it along with Mrs. Blackburn in China just last month. Several of my staff also saw it in Russia and Poland recently.

On the table to my left you can see both real and counterfeit movies, music, and consumer goods provided by the GAO. The real and counterfeit goods appear indistinguishable. In addition, the manufacture and sale of these items has become a significant global business. It is difficult to assess the exact economic losses, but the Office of the U.S. Trade Representatives report that U.S. companies lost between $200 and $250 billion in 2003 because of piracy and counterfeiting.

Our copyright, patent, and trademark laws protect intellectual property domestically, but foreign intellectual property laws are often totally lacking or woefully inadequate to protect legitimate U.S. intellectual property interests. Those countries that do have laws often don't enforce them. Enforcement efforts by many foreign governments have come under increased criticism as being ineffective.

Federal law charges a number of different U.S. Government agencies with responsibility for securing more comprehensive and effective protection of U.S. intellectual property rights abroad. These functions really fall into three categories: first, policy initiatives, such as negotiating trade agreements with foreign governments in coordination with international organizations such as the World Trade Organization and the World Intellectual Property Organization; second, Federal law enforcement actions, including multi-country investigations, seizure of goods at U.S. ports of entry, and patent and trademark infringements; and, third, training and technical assistance for foreign governments.

The agencies that have responsibility for these activities include the USTR, the Trade Rep., the Departments of State, Commerce, Justice, Homeland Security, the U.S. Patent and Trademark Office, U.S. International Trade Commission, the U.S. Agency for International Development, the Federal Bureau of Investigation, and the Library of Congress's Copyright Office.

The complexity of this issue requires coordination of specific functions among the Federal agencies involved. Formal efforts include the National Intellectual Property Law Enforcement Coordination Council, which was created in 1999 by Congress to coordinate law enforcement efforts among the various responsible Federal agencies.

The USTR also coordinates efforts to protect U.S. intellectual property through the Special 301 review, which consists of annual assessments on the effectiveness of foreign countries' efforts to protect U.S. intellectual property. Less formal coordination is ongoing at individual U.S. embassies in countries where intellectual property violations are severe.

Private industry has also taken action to enforce and protect its intellectual property rights abroad. A number of industry associations engage in collaborative efforts to advance foreign governments' protection of U.S. interests.

Because of the severity of the piracy problem and the vital importance of protecting U.S. innovation throughout the world, we asked the Government Accountability Office [GAO], to review and assess Federal agencies' responsibilities and efforts to combat intellectual property piracy in foreign countries. GAO has complied with its study and the report, which is entitled, "Intellectual Property-U.S. Efforts Have Contributed to Strengthened Laws Overseas, But Challenges Remain," confirms the severity of the piracy and counterfeiting problem. The report finds that agencies are actively engaged in combating this problem and have made progress in persuading foreign governments to strengthen their intellectual property laws; however, the report concludes that enforcement of these laws remains a major challenge. The report recommends that the NIPLECC's authority, structure, membership, and mission should be strengthened.

The committee will first welcome Congressman Rob Simmons from Connecticut, who will tell us about a manufacturer in Connecticut in his district that has experienced piracy and counterfeiting on its fuel gages.

We will then receive GAO's assessment of the intellectual property piracy problem as it relates specifically to U.S. software, movies, music, and designs for consumer and industrial products, and its recommendations for strengthening U.S. efforts to protect those problems.

Although we invited Federal Government agencies responsible for intellectual property protection to be here today to testify, they were unable to do so. While I am disappointed by their absence, we are going to continue to work with the administration to develop coordinated and effective reforms that will enhance the protection of U.S. intellectual property rights abroad.

Finally, the committee will hear from the private sector that is victimized by intellectual property piracy and counterfeiting in the world markets. We particularly want to receive their assessment of not only the situation they face in international markets, but also their own enforcement efforts in foreign countries.

This is an important issue that will receive increased attention in government and industry circles. In particular, we need to focus on enhancing foreign governments' enforcement efforts. The fact that the Senate CJS Appropriations bill for fiscal year 2005 includes $20 million for the NIPLECC and directs that entity to take more specific action to enhance intellectual property law enforcement internationally is one vehicle to consider.

Over the next few weeks we will be in a better position to determine whether enhancing the NIPLECC is the best solution or

whether other measures should also be taken. In light of this urgency, I felt that it was essential to proceed with this hearing today to hear GAO's findings and the industry's assessments.

So I want to thank all of our witnesses for appearing before the committee.

[The prepared statement of Chairman Tom Davis follows:]

Chairman Tom Davis
Committee on Government Reform
Hearing, "Intellectual Property Piracy:
Are We Doing Enough to Protect U.S. Innovation Abroad?"
Opening Statement
September 23, 2004

I would like to welcome everyone to today's hearing on intellectual property rights and the effectiveness of our efforts to protect U.S. interests from piracy abroad. The Committee will focus on counterfeiting and piracy in foreign countries of software, movies, music, and designs for consumer and industrial products that are protected by U.S. intellectual property laws.

Everyone knows that the United States is the greatest source of creativity in the world today. Our products, be they movies, music recordings, designer clothing, ship and airplane parts, fast food, or computer software, can be found in every market in every country in the world. If markets for U.S. goods derived from intellectual property are to be sustained and expanded, our products must be adequately protected in every market where they are found. Otherwise, jobs will be lost, not only the jobs of executives or movie stars or recording artists, but also technicians, carpenters, factory workers, and retailers. Moreover, consumer safety will also be in jeopardy, if knock-off goods, such as airplane, ship, or auto parts, or consumer products get into the mainstream of commerce and fail to perform as expected. Incentives to stimulate and encourage innovation will also be diminished, as capital necessary to foster this creativity will be lost to illegitimate interests.

Counterfeiting and piracy of U.S. intellectual property in foreign countries is rampant. Counterfeited editions of U.S. software, movies, music, and designs for consumer and industrial products can be found in markets throughout the world. I know, because I witnessed it in China in August. Several of my staff also saw it in Russia and Poland recently. On the table to my left, you can see both real and counterfeit movies, music, and consumer goods provided by GAO. The real and counterfeit goods appear indistinguishable. In addition, the manufacture and sale of these items has become a significant global business. It is difficult to assess the exact economic losses, but the Office of the U.S. Trade Representative (USTR) reported that U.S. companies lost between $200 and $250 billion in 2003 because of piracy and counterfeiting.

Our copyright, patent, and trademark laws protect intellectual property domestically, but foreign intellectual property laws are often either totally lacking or woefully inadequate to protect legitimate U.S. intellectual property interests. Those countries that do have laws often do not enforce them. Enforcement efforts by many foreign governments have come under increased criticism as being ineffective.

Federal law charges a number of different U.S. Government agencies with responsibility for securing more comprehensive and effective protection of U.S. intellectual property rights abroad. The functions fall in three categories:

- First, policy initiatives, such as negotiating trade agreements with foreign governments and coordinating with international organizations such as the World Trade Organization and the World Intellectual Property Organization;
- Second, Federal law enforcement actions, including multi-country investigations, seizure of goods at U.S. Ports of entry, and patent and trademark infringements; and
- Third, training and technical assistance programs for foreign governments.

The agencies that have responsibilities for these activities are USTR, the Departments of State, Commerce, Justice, and Homeland Security, the U.S. Patent and Trademark Office (USPTO), the U.S. International Trade Commission (ITC), the U.S. Agency for International Development (USAID), the Federal Bureau of Investigation (FBI), and the Library of Congress's Copyright Office.

The complexity of this issue requires coordination of specific functions among the Federal agencies involved. Formal efforts include the National Intellectual Property Law Enforcement Coordination Council (NIPLECC), which was created in 1999 by Congress to coordinate law enforcement efforts among the various responsible Federal agencies. The USTR also coordinates efforts to protect U.S. intellectual property through the Special 301 review, which consists of annual assessments of the effectiveness of foreign countries' efforts to protect U.S. intellectual property. Less formal coordination is ongoing at individual U.S. embassies in countries where intellectual property violations are severe.

Private industry has taken action to enforce and protect its intellectual property rights abroad. A number of industry associations engage in collaborative efforts to advance foreign governments' protection of U.S. interests.

Because of the severity of this piracy problem and the vital importance of protecting U.S. innovation throughout the world, we asked the Government Accountability Office (GAO) to review and assess Federal agencies' responsibilities and efforts to combat intellectual property piracy in foreign countries. GAO has completed its study. The report, entitled "Intellectual Property—U.S. Efforts Have Contributed to Strengthened Laws Overseas, but Challenges Remain," confirms the severity of the piracy and counterfeiting problem. The report finds that agencies are actively engaged in combating this problem and have made progress in persuading foreign governments to strengthen their intellectual property laws. However, the report concludes that enforcement of those laws remains a major challenge. The report recommends that NIPLECC's authority, structure, membership, and mission be strengthened.

The Committee will first welcome Congressman Rob Simmons, who will tell us about a manufacturer in his Connecticut district that has experienced piracy and counterfeiting of its fuel gauges.

We will then receive GAO's assessment of the intellectual property piracy problem as it relates specifically to U.S. software, movies, music, and designs for consumer and industrial products, and its recommendations for strengthening U.S. efforts to protect those U.S. products.

Although, we invited Federal government agencies responsible for intellectual property protection abroad to testify today, they were unable to do so at this time. While I am disappointed by their absence, we are working with the Administration to develop coordinated and effective reforms that will enhance the protections of U.S. intellectual property rights abroad.

Finally, the Committee will hear from private industry that is victimized by intellectual property piracy and counterfeiting in the world market. We particularly want to receive their assessment of not only the situation they face in international markets, but also their own enforcement efforts in foreign countries.

This is an important issue that will receive increased attention in government and industry circles. In particular, we need to focus on enhancing foreign governments' enforcement efforts. The fact that the Senate CJS Appropriations bill for Fiscal Year 2005 includes $20 million for NIPLECC and directs that entity to take more specific action to enhance intellectual property law enforcement internationally is one vehicle to consider. Over the next few weeks, we will be in a better position to determine whether enhancing NIPLECC is the best solution or whether other measures should be taken. In light of this urgency, I felt that it was essential to proceed with this hearing today and hear GAO's findings and the industry's assessment of the situation so that we can expeditiously craft an appropriate response.

I would like to thank all of our witnesses for appearing before the Committee, and I look forward to their testimony.

Chairman TOM DAVIS. I will now yield to our ranking member, Mr. Waxman.

Mr. WAXMAN. Thank you very much, Mr. Chairman, for this opportunity today to examine the serious challenge facing some of the most dynamic industries in the United States.

America's thriving intellectual property industry is a driving force of economic growth in this country. Revenues from movies, music, video games, computer software, digital and media technology constitute a significant percentage of our gross domestic product, contributing billions of dollars annually to the U.S. economy.

Despite this success and the popularity of these U.S. products worldwide, the industry's growth is imperiled by losses to piracy each year.

According to the Recording Industry Association of America, one out of every three music CDs sold in the world is pirated. And in July 2004, the Business Software Alliance released a report finding that one-third of software installed on computers last year was pirated.

U.S. Government activism has garnered increased protection for copyrighted works through the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights, bilateral free trade agreements, and global standards for recognized intellectual property rights. But these laws are only as useful as their enforcement.

Many of the world's worst offenders—who counterfeit and traffic millions of illegally copied CDs, videos, and software—operate undetected and undeterred. In countries like China and Russia, where property law is still in an early stage of development, corruption is also a tremendous obstacle.

Elsewhere, enforcement efforts suffer from a lack of training for investigators and prosecutors, competing priorities for law enforcement resources, or an inability to catch criminals because technology makes it so easy for them to hide.

The U.S. Government has had some success in using trade sanctions or even the threat of trade sanctions to pressure countries to crack down on IP theft. U.S. law enforcement has also been able to take advantage of the tremendous amount of investigative work originating from the IP industry itself. The Motion Picture Producers Association now has anti-piracy programs in over 60 countries and is an active participant in inspections, raids, and seizures.

Unfortunately, as the findings of the GAO report that prompted this hearing indicate, overseas enforcement efforts continue to suffer because of limitations on our own resources and lack of coordination between agencies. Interagency councils like the National Intellectual Property Law Enforcement Coordination Council and the National IPR Coordination Center, which were put in place at the end of the Clinton administration, have not been well organized or used to their full potential. Offices at the USTR and the State Department that handle IPR issues may not have a high enough profile to give this issue the constant level of attention it needs.

I look forward to the testimony of our panelists today to help us explore what is necessary for the United States to develop a com-

prehensive and effective strategy to combat piracy and advance international intellectual property protection.

Thank you, Mr. Chairman.

[The prepared statement of Hon. Henry A. Waxman follows:]

Statement of Rep. Henry A. Waxman
Ranking Minority Member
Committee on Government Reform
Hearing on "Intellectual Property Piracy: Are We Doing Enough to Protect U.S. Innovation Abroad?"

September 23, 2004

Mr. Chairman. Thank you for giving our Committee the opportunity today to examine serious challenges facing one of the most dynamic industries in the United States.

America's thriving intellectual property industry is a driving force of economic growth in this country. Revenues from movies, music, videogames, computer software, and digital and media technology constitute a significant percentage of our GDP, contributing billions of dollars annually to the U.S. economy.

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I look forward to the testimony of our panelists today to help us explore what is necessary for the United States to develop a comprehensive and effective strategy to combat piracy and advance international intellectual property protection.

Chairman TOM DAVIS. Thank you very much.

Mrs. Blackburn, you have been very active on this issue. Any opening statement? All right. If not, we will proceed to our first witness. We have the Honorable Rob Simmons from the Second District of Connecticut.

Rob, welcome. It is good to have you here today. Please proceed.

STATEMENT OF HON. ROB SIMMONS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CONNECTICUT

Mr. SIMMONS. Thank you, Mr. Chairman. I thank the ranking member and the members of the committee for convening today to discuss this critically important issue. I have a prepared statement that I would request be placed into the record as prepared, and I would like to summarize my remarks, Mr. Chairman.

Chairman TOM DAVIS. Without objection.

Mr. SIMMONS. We hear a lot about counterfeiting and piracy in the context of very large corporations, in the context of Hollywood and other well-known institutions, but the problem I am going to present to you today is that counterfeiting and piracy is hitting at the heart of small business. And whereas you may not hear a lot of publicity about it, it is having a crippling effect on the survival of small business and small manufacturing in America today, and it is the kind of thing that, quite frankly, angers me.

Earlier this year I met with David Blackburn, who lives in my hometown and who runs a small manufacturing company called Faria, which, for over 40 years, has produced gauges, initially for the automotive industry, more recently for the maritime industry. And, in fact, as this photo shows, they actually make gauges for Humvees and other types of military equipment.

A few months ago Mr. Blackburn told me that his products were being counterfeited by China and sold to some of his customers overseas; and he has customers in 22 countries overseas. The counterfeit gauges that were being sold were virtually exact replicas of his gauges, and I would ask my staff person to take these up to the chairman and have him take a look and see if he can tell the difference between the two gauges. And don't be fooled by the lettering on one of them.

The only area where we found that the counterfeit model was not exactly the same as the real thing was that the nuts did not go easily onto the bolts. But they even had an employee inspection sticker that was exactly the same as the employee inspection stickers used by the company. There is no question in my mind that the people that produced these counterfeit gauges were doing it knowingly and willingly, and this is a criminal act. These are criminals that are doing this.

Furthermore, when an overseas supplier discovered that these counterfeit gauges were flooding the market, the overseas supplier indicated to Mr. Blackburn that he would try to obtain one of the gauges, and then the person that sold the gauges to him threatened him and his family with violence if they "created any problems" and tried to stop the racket.

This is an outrageous situation that Mr. Blackburn and the Faria company have found themselves in.

After I learned of this problem, I scheduled a visit to the factory and was briefed by officials of Faria that they estimate they are losing about $2 million annually because of these counterfeit gauges that are flooding the markets around the world. And beyond the loss of sales, Faria has a lifetime guarantee for its gauges, because it is a quality name in gauge production. They are getting the phony gauges back, which are defective, to them, and then they are having to replace it with a real gauge at no cost.

When I returned back to Washington, I scheduled a meeting with the Department of Commerce, and I presented officials there in the Patent and Trademark Office, as well as the Office of Market Access and Compliance, with the counterfeit product, with the real product, and I asked them to initiate an investigation into the matter, which they did; and they actually sent an official over to China to look into the matter.

Nonetheless, the problem remains. Counterfeit gauges from Faria are flooding the market around the world. These gauges do not meet our high standards. Many of them are defective. They don't even reflect the information that the gauge is supposed to reflect. So the personal safety of the people using these gauges, perhaps our troops in Iraq or Afghanistan driving their Humvees, perhaps somebody driving an inboard or an outboard motorboat, where these gauges are telling them important information, perhaps these individuals are at risk because the information in the phony gauges is not coming across to the operator of the equipment. And then what happens if there is an accident, if somebody is hurt or somebody is killed? Who gets sued? Faria, of course. Faria.

Counterfeiting is a global challenge. We all know that. It is costing businesses' profits, worker's jobs, government's revenue; it is costing consumers and customers their safety. I am told that up to $200 to $250 billion annually is lost by U.S. companies because of counterfeiting. But, Mr. Chairman, the message that I am trying to convey to you today is this isn't just hitting the big companies. This isn't just hitting the name recording stars. This is hitting small and medium-sized manufacturing outfits all across this country.

Now, I love the Chinese people, I love their culture, I love their food. I lived in China for 3 years. I just came back from a trip to China a year or so ago. I spent 2 years of my life studying Chinese. But it is clear that over 50 percent of the counterfeits identified in America today are coming from China, and this has to stop. This is not competing, this is cheating. And cheating has no place in world trade, especially when it comes to the safety of our customers, especially when it comes to the security of the jobs of our workers. There is no place for cheating.

Mr. Chairman, again I thank you for having this important hearing, and I would be happy to answer any questions you may have.

[The prepared statement of Hon. Rob Simmons follows:]

Testimony of U.S. Representative Rob Simmons (CT-2)
House Committee on Government Reform
September 23, 2004

Mr. Chairman,

Thank you for the opportunity to testify before your committee today on this very important matter. If you thought counterfeiting and piracy in foreign countries of U.S. intellectual property was only a problem for big-boy manufacturers, I have a story for you.

Earlier this year, I met with Mr. David Blackburn of my hometown – Stonington, Connecticut. Mr. Blackburn is a constituent of mine and is president of a small manufacturer in my congressional district – the Faria Corporation.

Faria Corporation manufactures gauges and instruments for vehicles and boats. Faria employs over 300 people in my district and has been in existence for 40 years. In addition to supplying boat and vehicle makers with instruments, Faria also supplies the majority of instruments used by the U.S. military, including all of the instrument panels used in the HUMVEE. Mr. Blackburn wanted to be here today to testify in person, but unfortunately could not be with us today. Nevertheless, I am pleased to share with this committee his important story.

When I met with Mr. Blackburn, he told me that his company's products were being counterfeited and sold to some of his customers overseas. He presented me with evidence of this counterfeiting in the form of an almost exact replica of one of his company's gauges. One of his customers bought the imitation device for the express purpose of delivering it to Mr. Blackburn. Another customer of Mr. Blackburn's witnessed Faria's products being counterfeited and was offered the imitation product while on a trip to China.

Mr. Chairman, I found the counterfeit model to be indistinguishable from an authentic Faria product when viewed side-by-side by the naked eye. The only way to tell the two apart was that the nuts on the counterfeit model did not properly fit. There was no cosmetic difference. The criminals engaging in this activity clearly know what they are doing. And they are just that, Mr. Chairman -- criminals. Mr. Blackburn told me about instances of thugs from the Chinese company imitating Faria's gauges approaching his distributors in South America and threatening them and their families if they "created any problems" and tried to stop the racket.

After hearing of Faria's problems with counterfeiting, I scheduled a visit to their facility in Connecticut in June to talk further with Mr. Blackburn and his colleagues and to examine for myself the instruments they were manufacturing. I came away impressed by the quality of their work, but even more concerned about the impact of counterfeiting on Faria's business. Officials at the company told me that they are losing up to $2 million annually because of the immersion

of imitation Faria gauges into the market and that if such losses continue, lay-offs will be inevitable.

Upon returning to Washington, I scheduled a meeting with the Department of Commerce to present them with this clear case of counterfeiting. I presented officials with the Patent and Trademark Office as well as the Office of Market Access and Compliance the counterfeit product along with a genuine model and urged them to put the full resources of the Commerce Department behind an investigation into who is responsible for this crime. I told them that by making and selling a defective and fraudulent product at a cut-rate price, these criminals harm Faria's reputation, undercut their sales, and directly threaten the safety of those -- including our troops riding in HUMVEES in Iraq -- who unknowingly operate vehicles or boats with counterfeit instruments. Commerce officials have met with Mr. Blackburn and visited Faria and are working with him to locate those who are counterfeiting his product. The investigation is on-going.

While there is no better example of the adverse impact of counterfeiting then with Faria in my district, this is not a problem limited to the southeastern corner of Connecticut – far from. Counterfeiting is a global challenge that is costing businesses' profits, worker's jobs, government's revenue, consumers and customers their safety, and, perhaps most seriously, costing all citizens their security as terror groups turn to counterfeiting to underwrite their training and attacks.

I will let others who are more knowledgeable than I talk at greater length about these national and international implications, but I will offer this one statistic: according to the Federal Bureau of Investigation, U.S. companies are losing between $200 and $250 billion annually because of counterfeiting. Again, Mr. Chairman, that is between $200 and $250 BILLION each year. These are dollars being taken directly from the pockets of working men and women across America each year. And the problem is getting worse.

Action must be taken. We must tell the Chinese and others who are turning a blind eye to these criminal acts that we will not stand for their inaction any longer. These criminals are cheating, not competing. It is not "free trade," it is not "fair trade," it is cheating, pure and simple.

And no matter how fine a product my constituents produce at the Faria Corporation, they simply can't keep pace when cheap, knock-off devices with no distinguishable difference from the genuine Faria article are entering the market. More and more of the counterfeit devices will be purchased and prove defective. And every time that happens, Faria's professional reputation drops another notch, one more buyer chooses to shop elsewhere, and one, two, or three more of my constituents find themselves out of a job through not fault of their own.

I thank you, Mr. Chairman, for the opportunity to present the story of one company's experience with counterfeiting and urge all of my colleagues to join me in fighting to put a stop to this practice. Our nation's economy and our constituent's jobs depend on it.

Chairman TOM DAVIS. Representative Simmons, thank you very much. You make the case factually and passionately. Of course, these gauges also hurt Faria's reputation, don't they, in the marketplace?

Mr. SIMMONS. Absolutely. If you are a boat builder, if you are a manufacturer that relies on panels of gauges for your product, and you discover that the "Faria gauge" that you bought is defective, that it isn't working, that you are going to have to send it in for a replacement, not knowing it is a counterfeit, after a while you are going to say, well, you know, there is something wrong with the quality of Faria; they are not as good as they used to be, they are cutting corners, the bolts don't fit; we are going to go to a Swiss manufacturer, we are going to go to a German manufacturer, we are going to go to somebody else, we are going to go another name brand.

And what happens is this company, that was started in my district over 40 years ago, where the founder of the company had a bunch of patents on gauges, where 300 people continue to make the best gauges in the world, the name brand gauges, they are being undercut, and eventually put out of business, by counterfeits and cheating.

Chairman TOM DAVIS. Does the Chinese Government know the source of these phony gauges?

Mr. SIMMONS. The investigation continues. Originally, the company that was suspected of being the source was taken off a Web page that was managed by the government. Now there is some discussion as to whether the Faria Corp. should have had an agent in China to somehow establish a legal relationship with the Chinese Government.

Let me ask you this, Mr. Chairman. How many of our small companies must place an agent in China to prevent China from cheating and counterfeiting? I don't think that is a fair thing to say. So the bottom line is——

Chairman TOM DAVIS. It doesn't work, either.

Mr. SIMMONS. It doesn't work. The bottom line is that the investigation continues. But I consider this matter so important and so significant that I took those gauges right down to the Commerce Department myself and presented it to them and asked them for an investigation. To their credit, they have been to China on the issue; they have been up into my district on the issue. But it has not been resolved to my satisfaction at this point in time.

Chairman TOM DAVIS. Has the Chinese Government done anything about this that you are aware of?

Mr. SIMMONS. Not to my knowledge.

Chairman TOM DAVIS. Have they given you a letter at least?

Mr. SIMMONS. Not to me, no.

Chairman TOM DAVIS. We have, right down here in the front left, some items that I am not going to single out any particular country, but—well, I will, a couple. If you want a pair of Nike shoes, we have some from $3 that you can buy in Brazil, complete with the label. You can get a math CD program from Russia for $3.33, a Lord of the Rings for $6.67. I was tempted to take that one, but it is in Russian; it wouldn't do me any good. All kinds of shampoos and detergent for cut rate costs. Christina Aguillera tape for $1.50;

Britney Spears for $1.50, which, in my opinion, is overpriced even at that. Don't tell my teenage daughter.

But the fact is this is going on in some of the countries; it is not just China, unfortunately, it is Russia, it is the Ukraine, it is Brazil, it is all over the world.

We appreciate your bringing this to our attention, and I am sorry that the USTR and some of our enforcement groups are not here today to react to this before this committee, but we will get them back here and we will try to help you as you stay on your case. We appreciate your being here.

Mr. SIMMONS. Thank you, Mr. Chairman, and, yes, it is unfortunate because these people are charged with this responsibility, and the confidence that we have, or the lack of confidence, goes to the issue of how aggressively they are going to pursue these things.

Again, one can say that this is only a small company in a little State up in New England, 300 workers; it doesn't really matter in the big scheme of things. But I guarantee you there are hundreds, if not thousands, of the same small companies that are falling victim to this cheating and to this counterfeiting, and they slowly go off the map one at a time; a little one here, a little one there, a little one over there, and nobody is counting. Nobody is counting. But if you add it all up, it is a huge hit to our country and to our working men and women, and we need to fight back.

Chairman TOM DAVIS. Thank you very much.

Mrs. Blackburn, any questions?

Mrs. BLACKBURN. Thank you, Mr. Chairman.

Representative Simmons, I want to thank you for bringing the issue forward and working so closely with your constituent. Where I come from in Tennessee, with the music industry, we see a lot of this. Our tool and dye manufacturers are also beginning to have a problem with this, as they are suppliers for the auto industry for many things that are manufactured there.

I do have just one quick question I would like for you to address because, as the chairman mentioned, we were in China recently, or through Southeast Asia, working on this and had a couple of conversations with some folks as we looked at this issue and thought, well, maybe there is a role for some NGO's in this process, as far as helping with education and with kind of rooting out the causes of this. You know, you mentioned in your testimony that whomever makes these is knowingly, willingly doing this and putting Faria and their employees at great risk, as well as the consumers of the Faria gauge.

Now, has Faria been able, at their own expense, which, of course, all of this, for small business, this always lands on their back; they have to pay for finding out who is doing wrong to them. Have they been able to go back and trace what a link may have been or why a counterfeiter would have picked up? Did they have association at one point in time with someone in Southeast Asia, or was this just like a bad thing that happened to come their way?

Mr. SIMMONS. First of all, I think you have put your finger right on the heart of the subject, which is this is not happening because it is an accident; this is happening on purpose. Faria is a name brand, just like Britney Spears, like it or not, it is a name brand. So they are imitating name brands. Point two: they are a small

business. The only reason they found out about the gauges that are in that magazine is because a customer in a foreign country was offered a batch of "Faria gauges" at a discount. They were counterfeit. And that customer had the courage to report that back to the headquarters in Connecticut and was subsequently threatened by the Chinese vendor with physical violence if they ratted out the racket.

So, you see, it was a series of fortuitous circumstances that actually brought this to the attention. They knew they were losing market share in these countries; they weren't quite sure how. But how does a company of 300 employees, locally based in a small State, how do they have the resources to track down what really is an international conspiracy of criminal activities that is condoned with a wink and a nod by a major nation? How can they do that? They can't.

Mrs. BLACKBURN. So Faria still does not know the location of the plant or the individual funding, putting the money into the plant making the counterfeit goods.

Mr. SIMMONS. Absolutely correct. And if there is to be any follow-up, my feeling is if you can find that company and those people, you not only shut them down, but you confiscate the equipment.

I lived in Taiwan for 3 years a number of years ago. The issue of counterfeits and fakes is well known; it has plagued American industry for 30, 40 years. We are all familiar with that. These things don't happen by accident. You don't have a bunch of free enterprising entrepreneurs somewhere over there just doing this on their own. It doesn't happen by accident. The government condones it with a wink and a nod.

If you expose a case, as we are trying to do here, there will be many apologies: very sorry; big mistake; we didn't know about it. That is just a bunch of nonsense. Over 66 percent of the counterfeits coming into America today are coming in from China. That is not a mistake. And it is incumbent upon us, the Congress, the executive branch of the United States of America, to address and confront the problem, because these little guys just can't do it on their own; they just don't have the resources.

And I give Mr. Blackburn and his employees high marks for having the courage to bring this to our attention and publicize it because, again, one of his customers in a foreign country was physically threatened with violence if they disclosed the situation.

Chairman TOM DAVIS. Ms. Sanchez, do you have any questions?

Ms. SANCHEZ. Yes, thank you.

I read with interest about the new developments and how technologically potentially can help hinder piracy, but going back to the issue of piracy, who would you say are the United States' best allies in trying to combat international piracy?

Mr. SIMMONS. I think our best allies in that are other countries like us who invest a lot of money into research and development, who bring new products online at great cost, who have an educated and a creative work force who have free enterprise systems where creativity is rewarded and we try to protect it through patents and other sorts of protections for intellectual property.

I think it is the western democracies and what I call the free world. We must do this together. We must work to enforce this to-

gether. And I think that we have to work on a global basis. And I also think, and I have not seen to my satisfaction, that we have to punish those nations who willfully engage in these activities with a wink and a nod. We must have a system in place to punish them for that; punishment, not just saying, you know, you shouldn't do that, please don't do it again.

Ms. SANCHEZ. I read with interest about international trade agreements, and some of the procedural protections that they try to build in to help encourage countries that are interested in doing trade with the United States, serious enforcement of piracy and intellectual property rights. And I missed part of your testimony, so I apologize, but how would you say China is doing in their serious investigation and prosecution of piracy?

Mr. SIMMONS. I have no evidence of that. And in my discussions with the Commerce Department, I have asked to see how we are doing in enforcement. You know, you can pass all the laws in the world, but if there is no enforcement, it doesn't work. You can sign all the treaties in the world and have a nice glass of champagne, that we have just signed this wonderful treaty; isn't it great; it is going to be fair trade, free trade, whatever it is.

But if there is no enforcement of labor regulations, if there is no enforcement of environmental codes, if there is no enforcement against piracy and counterfeiting, if there is no enforcement and if there is no punishment for doing that, it is a worthless piece of paper.

Ms. SANCHEZ. So would it be your testimony that you don't think that trade agreements, in and of themselves, can be a type of leverage used to help thwart piracy that is going on internationally?

Mr. SIMMONS. I think they can, but they must be enforced. My concerns about counterfeiting and pirating go back several years, in fact, but I never could find a concrete example of it in my own experience, in my own district. So all I could do was talk about it.

But when this issue came up of counterfeit gauges pressuring a company in my district, my neighbors, a man who lives in my home town, who runs this company, that they are at risk, over the long term, of being put out of business by counterfeiting, that is why I took these gauges down to the Commerce Department. That is why I put them on the table. I said, here is an example. Show me what you are going to do about it.

You know, I am from Connecticut, but let us say I am from Missouri, the Show Me State. Show me. Show me what you are going to do about it. This is a little case; not complicated, not big, it is a little case. Show me what you can do with a little case. And, quite frankly, if you can't be successful with a little case, you are not going to be successful with a big case. And that tells you the nature of the problem.

Ms. SANCHEZ. And I would venture to guess, and correct me if I am wrong, that it would be more difficult for U.S. agencies to enforce these laws than for foreign governments to enforce them in their own home jurisdictions.

Mr. SIMMONS. If the home governments aren't willing to cooperate with enforcement, it is simply not going to work. I think we know that. And that is why I say governments may condone the

activity with a wink and a nod, but when confronted, maybe they will accommodate you.

But that is not good enough; they have to be 100 percent with the program. And the time will come. My guess is the time will come when China and other countries that are engaged in counterfeiting may begin to create things on their own, and then suddenly they will have an interest in protecting those creations. But they ain't there yet.

Ms. SANCHEZ. Thank you. I have no more questions.

Chairman TOM DAVIS. Thank you very much, Rob. We appreciate your calling this to our attention, and we will continue to work with you on this. Good luck.

Mr. SIMMONS. Thank you, Mr. Chairman, and thank you and the members of your committee for addressing this important issue.

Chairman TOM DAVIS. Thank you.

We have our second panel up. We have GAO up now.

We will take a 1-minute break.

[Recess.]

Chairman TOM DAVIS. We will now call Loren Yager, who is the Director of International Affairs and Trade at the Government Accountability Office.

Dr. Yager, it is our policy we swear you in. If you would just raise your right hand.

[Witness sworn.]

Chairman TOM DAVIS. Thank you very much for being here. You have done a good study on this thing that I had occasion to read last night. The entire report is in the record, so if you could proceed to sum it up, then we can move right to questions. Thank you very much for your work on this.

STATEMENT OF LOREN YAGER, PH.D., DIRECTOR, INTERNATIONAL AFFAIRS AND TRADE, U.S. GOVERNMENT ACCOUNTABILITY OFFICE

Mr. YAGER. Thank you, Mr. Chairman, members of the committee. Thank you for the opportunity to discuss our work on U.S. efforts to protect U.S. intellectual property rights overseas. The statement that I will give today is drawn from the GAO report that was just released by the committee today, and copies are available on the table by the door. I will summarize a few of the key points in my oral statement, and I also ask that the written statement be entered into the record.

To understand more fully how U.S. agencies have performed in protecting IP abroad, you asked us to identify and review U.S. agency activities. This testimony addresses three things: the specific efforts of U.S. agencies to improve IP protection in other nations, the means that they use to coordinate these efforts abroad, and, finally, the challenges facing enforcement efforts abroad.

To address these issues, we met with key government officials from agencies, including USTR, Commerce, Justice, FBI, State Department, and Homeland Security, among others. In addition, we met with officials from key intellectual property industry groups, including those represented here today at the hearing.

We also conducted research in four countries where serious problems regarding the protection of intellectual property have been re-

ported: Brazil, China, Russia, and the Ukraine. And as you mentioned, Mr. Chairman, we brought a few items back which demonstrate some of the problems associated with piracy.

As to the first types of efforts, U.S. agencies' efforts to improve protection of intellectual property in foreign nations fall into three categories: policy initiatives, training and assistance activities, and law enforcement actions. USTR leads policy initiatives with an annual assessment known as the Special 301 review, which results in an annual report detailing global IP challenges and identifying countries with the most significant problems. This report involves input from many U.S. agencies and industry.

In addition to conducting policy initiatives, most agencies involved in IP issues also engage in training and assistance. Further, although counterterrorism is the overriding priority of U.S. law enforcement agencies, agencies such as the Departments of Justice and Homeland Security conduct law enforcement activities regarding IPR. I understand that the committee has requested work from GAO on the subject of seizures of counterfeit cigarettes and other illegal goods, so you are aware of agency efforts in this area.

As to the second item on coordination mechanisms, let me talk about two mechanisms that have very different results. For example, on the policy side, formal interagency meetings are conducted each year as part of the U.S. Government's annual Special 301 review.

Mr. Chairman, I am sorry that the agency witnesses are not available for this hearing, as we can report quite positive findings on the Special 301 process. Both the Government and industry sources that we met with view this effort as effective and thorough. This effort focuses the attention of a variety of private sector, U.S. agency, and foreign officials on this subject each year, and this attention does lead to changes and improvements overseas.

Conversely, the National Intellectual Property Law Enforcement Coordination Council [NIPLECC], has struggled to find a clear mission. NIPLECC was established to coordinate domestic and international IP law enforcement among U.S. Federal and foreign entities, but it has undertaken few activities and is perceived by officials from both the private sector and in some U.S. agencies as having little impact. This mechanism needs the attention of the Congress, as it is not working. To that end, we have a matter for congressional consideration on the NIPLECC in our report.

On the final point, Mr. Chairman, both you and the ranking member stated that enforcement is now the key issue. We certainly agree with that. As we detail in the report, economic factors, as well as the involvement of organized crime, pose significant challenges to United States and foreign governments' enforcement efforts, even in countries where the political will exists for protecting intellectual property.

In addition, economic factors, including low barriers to producing counterfeit or pirated goods, potentially high profits for producers of such goods, and large price differentials between legitimate and counterfeit products for consumers, create huge incentives for piracy. In some industries the problem of IP theft is getting worse despite these U.S. Government efforts.

Mr. Chairman, this concludes my testimony. I would be happy to answer any questions you or other members of the committee may have. I also have some specific observations and insights from our field work in those four countries that I would be able to summarize for the committee, if you are interested.

Chairman TOM DAVIS. Well, why don't you take a second and summarize that, because I think that is important for you to do that?

Mr. YAGER. OK. Some of these relate directly to the examples that Representative Simmons gave earlier, and also some of the things in your statement.

One thing that I could start out by mentioning is the wide range of quality in pirated and counterfeit goods that is immediately evident from the various items that we have on display here. It reflects the fact that many of these goods copies might either be produced in a large, sophisticated factory or they might be produced in someone's apartment on a DVD or a CD burner. You can see some of that range of quality on display with some of the CDs and videos in very rudimentary packaging, while others could easily be mistaken for an original.

This presents significant problems for enforcement. Let me mention too. Authorities cannot focus on one particular site or source of pirated goods, since they can be produced cheaply in a variety of locations. As a result, shutting off the supply is enormously difficult, particularly for digital products, where reasonable copies can be produced on very inexpensive equipment.

Another problem is that in some cases authorities may have difficulty in distinguishing the real goods from the fake goods, making the process much more time-consuming and requiring significant expertise. For example, I visited with Hong Kong Customs authorities when they were inspecting goods coming across the border from China, and they indicated that the high quality of some goods makes it impossible for them to determine the authenticity of those goods. In fact, they indicated that even the product representatives of the firms that were shipping those goods often had to consult their order and shipping information in order to determine whether the goods coming across the border were legitimate or whether they were pirated goods.

A second issue is the enormous volume of pirated and counterfeit goods. When countries do undertake a vigorous effort to seize and prosecute these crimes, they quickly run into problems associated with storage and management of all the items. Single raids of small-time shops or markets can yield hundreds of CDs and DVDs, handbags, cigarettes, or other goods; and raids on factories or distribution centers can create many times that much merchandise.

In a number of the police stations and other locations that we visited, this rapidly overwhelms their storage capacity and, depending upon the evidentiary requirements of their legal systems, it may be necessary for eventual prosecution. Given the slow pace of many of the judicial systems in many nations, you can see how this creates some fairly daunting practical problems.

The third and final issue I want to raise is that not all countries are equal in their self interest to actively combat intellectual property crimes. While most governments would see this as one more

way to reduce opportunities for corruption and crime, they might differ greatly on what priority to assign to these activities, and to what extent the interest groups in these countries would support this effort.

For example, in a country where the domestic industry is also losing sales and royalties, they can be effective in campaigns to educate the public on the cost of privacy. Brazil is a very good example of this, as a large share of their domestic music sales are from Brazilian artists, and they have been outspoken in their own anti-piracy campaign. Brazilian musicians are obviously held in very high esteem in that country, and we understand that this public relations campaign with those artists has been effective.

On the other hand, in nations where there is no confluence of interest between foreign and domestic firms, the situation is much different. If the only earnings are from the export of pirated items, it is much more difficult to convince the nations that it is in their interest to make IP enforcement a priority and tools such as the Special 301 must be used.

Mr. Chairman, those are the insights we had from our field work. I would be happy to answer any further questions.

[The prepared statement of Mr. Yager follows:]

United States Government Accountability Office

GAO

Testimony

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INTELLECTUAL PROPERTY

U.S. Efforts Have Contributed to Strengthened Laws Overseas, but Challenges Remain

Statement of Loren Yager,
Director, International Affairs and Trade

GAO-04-1093T

September 23, 2004

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Highlights

Highlights of GAO-04-1093T, a testimony before the Committee on Government Reform, House of Representatives

INTELLECTUAL PROPERTY

U.S. Efforts Have Contributed to Strengthened Laws Overseas, but Challenges Remain

Why GAO Did This Study

Although the U.S. government provides broad protection for intellectual property, intellectual property protection in parts of the world is inadequate. As a result, U.S. goods are subject to piracy and counterfeiting in many countries. A number of U.S. agencies are engaged in efforts to improve protection of U.S. intellectual property abroad. This testimony, based on a recent GAO report, describes U.S agencies' efforts, the mechanisms used to coordinate these efforts, and the impact of these efforts and the challenges they face.

What GAO Recommends

GAO is not recommending executive action. However, the Congress may wish to review the National Intellectual Property Law Enforcement Coordination Council's authority, operating structure, membership, and mission.

www.gao.gov/cgi-bin/getrpt?GAO-04-1093T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Loren Yager at (202) 512-4128 or yagerl@gao.gov.

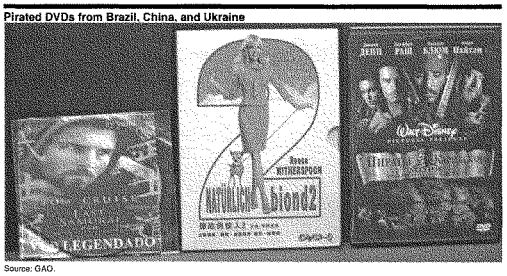
What GAO Found

U.S. agencies undertake policy initiatives, training and assistance activities, and law enforcement actions in an effort to improve protection of U.S. intellectual property abroad. Policy initiatives include assessing global intellectual property challenges and identifying countries with the most significant problems—an annual interagency process known as the "Special 301" review—and negotiating agreements that address intellectual property. In addition, many agencies engage in training and assistance activities, such as providing training for foreign officials. Finally, a small number of agencies carry out law enforcement actions, such as criminal investigations involving foreign parties and seizures of counterfeit merchandise.

Agencies use several mechanisms to coordinate their efforts, although the mechanisms' usefulness varies. Formal interagency meetings—part of the U.S. government's annual Special 301 review—allow agencies to discuss intellectual property policy concerns and are seen by government and industry sources as rigorous and effective. However, the National Intellectual Property Law Enforcement Coordination Council, established to coordinate domestic and international intellectual property law enforcement, has struggled to find a clear mission, has undertaken few activities, and is generally viewed as having little impact.

U.S. efforts have contributed to strengthened intellectual property legislation overseas, but enforcement in many countries remains weak, and further U.S. efforts face significant challenges. For example, competing U.S. policy objectives take precedence over protecting intellectual property in certain regions. Further, other countries' domestic policy objectives can affect their "political will" to address U.S. concerns. Finally, many economic factors, as well as the involvement of organized crime, hinder U.S. and foreign governments' efforts to protect U.S. intellectual property abroad.

Pirated DVDs from Brazil, China, and Ukraine



Source: GAO.

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to discuss our work on U.S. efforts to protect U.S. intellectual property rights (IPR) overseas and our recent report on this topic.[1] As you know, the United States dominates the creation and export of intellectual property—creations of the mind. The U.S. government provides broad protection for intellectual property through means such as copyrights, patents, and trademarks. However, protection of intellectual property in many parts of the world is inadequate. As a result, U.S. goods are subject to substantial counterfeiting and piracy in many countries.

The U.S. government, through numerous agencies, is seeking better intellectual property protection overseas. To understand more fully how U.S. agencies have performed in this regard, you asked us to identify and review their activities. This testimony addresses (1) the specific efforts of U.S. agencies to improve intellectual property protection in other nations, (2) the means used to coordinate these efforts, and (3) challenges facing the enforcement efforts abroad.

To address these issues, we analyzed key U.S. government reports and documents from eight federal agencies and two offices. In addition to meeting with federal officials, we met with officials from key intellectual property industry groups and reviewed reports they had prepared. We also conducted field work in four countries where serious problems regarding the protection of intellectual property have been reported (Brazil, China, Russia, and Ukraine) and met with U.S. embassy and foreign government officials as well as representatives of U.S. companies and industry groups operating in those countries. We conducted our work from June 2003 through July 2004, in accordance with generally accepted government auditing standards.

Summary

U.S. agencies' efforts to improve protection of U.S. intellectual property in foreign nations fall into three categories—policy initiatives, training and assistance activities, and law enforcement actions. The Office of the U.S. Trade Representative (USTR) leads U.S. policy initiatives with an annual assessment known as the "Special 301" review, which results in an annual

[1]GAO, *Intellectual Property: U.S. Efforts Have Contributed to Strengthened Laws Overseas, but Challenges Remain*, GAO-04-912 (Washington, D.C.: Sept. 8, 2004).

report detailing global intellectual property challenges and identifying countries with the most significant problems. This report involves input from many U.S. agencies and industry. In addition to conducting policy initiatives, most agencies involved in intellectual property issues overseas also engage in training and assistance activities. Further, although counterterrorism is the overriding U.S. law enforcement concern, U.S. agencies such as the Departments of Justice and Homeland Security conduct law enforcement activities regarding IPR.

Several mechanisms exist to coordinate U.S. agencies' efforts to protect U.S. intellectual property overseas, although the level of activity and usefulness of these mechanisms vary. For example, on the policy side, formal interagency meetings are required each year as part of the U.S. government's annual Special 301 review. Government and industry sources view this effort as effective and thorough. Conversely, the National Intellectual Property Law Enforcement Coordination Council,[2] which was established to coordinate domestic and international intellectual property law enforcement among U.S. federal and foreign entities, has struggled to find a clear mission, has undertaken few activities, and is perceived by officials from the private sector and some U.S. agencies as having little impact.

U.S. efforts have contributed to strengthened foreign IPR laws, but enforcement overseas remains weak and U.S. efforts face numerous challenges. For example, competing U.S. policy objectives may take priority over protecting intellectual property in certain countries. In addition, the impact of U.S. activities overseas is affected by countries' domestic policy objectives and economic interests, which may complement or conflict with U.S. objectives. Further, economic factors, as well as the involvement of organized crime, pose additional challenges to U.S. and foreign governments' enforcement efforts, even in countries where the political will for protecting intellectual property exists. These economic factors include low barriers to producing counterfeit or pirated goods, potential high profits for producers of such goods, and large price differentials between legitimate and counterfeit products for consumers.

[2]NIPLECC was mandated under Section 653 of the Treasury and General Government Appropriations Act, 2000, Public Law 106-58 (15 U.S.C. 1128).

Background

Intellectual property is an important component of the U.S. economy, and the United States is an acknowledged global leader in the creation of intellectual property. However, industries estimate that annual losses stemming from violations of intellectual property rights overseas are substantial. Further, counterfeiting of products such as pharmaceuticals and food items fuels public health and safety concerns. USTR's Special 301 reports on the adequacy and effectiveness of intellectual property protection around the world demonstrate that, from a U.S. perspective, intellectual property protection is weak in developed as well as developing countries and that the willingness of countries to address intellectual property issues varies greatly.

Eight federal agencies, as well as the Federal Bureau of Investigation (FBI) and the U.S. Patent and Trademark Office (USPTO), undertake the primary U.S. government activities to protect and enforce U.S. intellectual property rights overseas. The agencies are the Departments of Commerce, State, Justice, and Homeland Security; USTR; the Copyright Office; the U.S. Agency for International Development (USAID); and the U.S. International Trade Commission.[3]

U.S. Agencies Undertake Three Types of IPR Efforts

The efforts of U.S. agencies to protect U.S. intellectual property overseas fall into three general categories—policy initiatives, training and technical assistance, and U.S. law enforcement actions.

Policy Initiatives

U.S. policy initiatives to increase intellectual property protection around the world are primarily led by USTR, in coordination with the Departments of State and Commerce, USPTO, and the Copyright Office, among other agencies. A centerpiece of policy activities is the annual Special 301 process.[4] "Special 301" refers to certain provisions of the Trade Act of 1974, as amended, that require USTR to annually identify foreign

[3]Although the FBI is part of the Department of Justice and the USPTO is part of the Department of Commerce, their roles will be discussed separately because of their distinct responsibilities.

[4]Other policy actions include: use of trade preference programs for developing countries that require IPR protection, such as the Generalized System of Preferences; negotiation of agreements that address intellectual property; participation in international organizations that address IPR issues; and, diplomatic efforts with foreign governments.

countries that deny adequate and effective protection of intellectual property rights or fair and equitable market access for U.S. persons who rely on intellectual property protection. USTR identifies these countries with substantial assistance from industry and U.S. agencies and publishes the results of its reviews in an annual report. Once a pool of such countries has been determined, the USTR, in coordination with other agencies, is required to decide which, if any, of these countries should be designated as a Priority Foreign Country (PFC).[5] If a trading partner is identified as a PFC, USTR must decide within 30 days whether to initiate an investigation of those acts, policies, and practices that were the basis for identifying the country as a PFC. Such an investigation can lead to actions such as negotiating separate intellectual property understandings or agreements between the United States and the PFC or implementing trade sanctions against the PFC if no satisfactory outcome is reached.

Between 1994 and 2004, the U.S. government designated three countries as PFCs—China, Paraguay, and Ukraine—as a result of intellectual property reviews. The U.S. government negotiated separate bilateral intellectual property agreements with China and Paraguay to address IPR problems. These agreements are subject to annual monitoring, with progress cited in each year's Special 301 report. Ukraine, where optical media piracy was prevalent, was designated a PFC in 2001. The United States and Ukraine found no mutual solution to the IPR problems, and in January 2002, the U.S. government imposed trade sanctions in the form of prohibitive tariffs (100 percent) aimed at stopping $75 million worth of certain imports from Ukraine over time.

Training and Technical Assistance

In addition, most of the agencies involved in efforts to promote or protect IPR overseas engage in some training or technical assistance activities. Key activities to develop and promote enhanced IPR protection in foreign countries are undertaken by the Departments of Commerce, Homeland Security, Justice, and State; the FBI; USPTO; the Copyright Office; and USAID. Training events sponsored by U.S. agencies to promote the enforcement of intellectual property rights have included enforcement programs for foreign police and customs officials, workshops on legal reform, and joint government-industry events. According to a State

[5]PFCs are those countries that (1) have the most onerous and egregious acts, policies, and practices with the greatest adverse impact (actual or potential) on the relevant U.S. products and (2) are not engaged in good-faith negotiations or making significant progress in negotiations to address these problems.

Department official, U.S. government agencies have conducted intellectual property training for a number of countries concerning bilateral and multilateral intellectual property commitments, including enforcement, during the past few years. For example, intellectual property training was conducted by numerous agencies over the last year in Poland, China, Morocco, Italy, Jordan, Turkey, and Mexico.

U.S. Law Enforcement Efforts

A small number of agencies are involved in enforcing U.S. intellectual property laws, and the nature of these activities differs from other U.S. government actions related to intellectual property protection. Working in an environment where counterterrorism is the central priority, the FBI and the Departments of Justice and Homeland Security take actions that include engaging in multicountry investigations involving intellectual property violations and seizing goods that violate intellectual property rights at U.S. ports of entry. For example, the Department of Justice has an office that directly addresses international IPR problems.[6] Justice has been involved with international investigation and prosecution efforts and, according to a Justice official, has become more aggressive in recent years. For instance, Justice and the FBI recently coordinated an undercover IPR investigation, with the involvement of several foreign law enforcement agencies. The investigation focused on individuals and organizations, known as "warez" release groups, which specialize in the Internet distribution of pirated materials. In April 2004, these investigations resulted in 120 simultaneous searches worldwide (80 in the United States) by law enforcement entities from 10 foreign countries[7] and the United States in an effort known as "Operation Fastlink."

Although investigations can result in international actions such as those cited above, FBI officials told us that they cannot determine the number of past or present IPR cases with an international component because they do not track or categorize cases according to this factor. Department of Homeland Security (DHS) officials emphasized that their investigations

[6]The Computer Crime and Intellectual Property Section (CCIPS) addresses intellectual property issues (copyright, trademark, and trade secrets) within the Department of Justice's Criminal Division. In April 2004, CCIPS appointed an International Coordinator for Intellectual Property.

[7]These foreign countries were Belgium, Denmark, France, Germany, Hungary, Israel, the Netherlands, Singapore, Sweden, and Great Britain and Northern Ireland. According to a Justice official, law enforcement officials in Spain subsequently took action against related targets in that country.

include an international component when counterfeit goods are brought into the United States. However, DHS does not track cases by a specific foreign connection. The overall number of IPR-oriented investigations that have been pursued by foreign authorities as a result of DHS efforts is unknown.

DHS does track seizures of goods that violate IPR and reports seizures that totaled more than $90 million in fiscal year 2003. Seizures of IPR-infringing goods have involved imports primarily from Asia. In fiscal year 2003, goods from China accounted for about two-thirds of the value of all IPR seizures, many of which were shipments of cigarettes.[8] Other seized goods from Asia that year originated in Hong Kong and Korea. A DHS official pointed out that providing protection against IPR-infringing imported goods for some U.S. companies—particularly entertainment companies—can be difficult, because companies often fail to record their trademarks and copyrights with DHS.[9]

Several Mechanisms Coordinate IPR Efforts, but Their Usefulness Varies

Several interagency mechanisms exist to coordinate overseas intellectual property policy initiatives, development and assistance activities, and law enforcement efforts, although these mechanisms' level of activity and usefulness varies.

Formal Interagency Coordination on Trade Policy

According to government and industry officials, an interagency trade policy mechanism established by the Congress in 1962 to assist USTR has operated effectively in reviewing IPR issues. The mechanism, which consists of tiers of committees as well as numerous subcommittees, constitutes the principle means for developing and coordinating U.S. government positions on international trade, including IPR. A specialized

[8]For information on cigarette smuggling, see GAO, *Cigarette Smuggling: Federal Law Enforcement Efforts and Seizures Increasing*, GAO-04-641 (Washington, D.C.: May 28, 2004).

[9]A DHS official noted that the Trade Secrets Act (18 U.S.C. 1905) precludes sharing information about specific imports, even where there is criminal activity. The Trade Secrets Act makes it a criminal offense for an employee of the United States, or one of its agencies, to disclose trade secrets and certain other forms of confidential commercial and financial information except where such disclosure is "authorized by law."

subcommittee is central to conducting the Special 301 review and determining the results of the review.

This interagency process is rigorous and effective, according to U.S. government and industry officials. A Commerce official told us that the Special 301 review is one of the best tools for interagency coordination in the government, while a Copyright Office official noted that coordination during the review is frequent and effective. A representative for copyright industries also told us that the process works well and is a solid interagency effort.

National Intellectual Property Law Enforcement Coordination Council

The National Intellectual Property Law Enforcement Coordination Council (NIPLECC), created by the Congress in 1999 to coordinate domestic and international intellectual property law enforcement among U.S. federal and foreign entities, seems to have had little impact. NIPLECC consists of (1) the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office; (2) the Assistant Attorney General, Criminal Division; (3) the Under Secretary of State for Economic and Agricultural Affairs; (4) the Deputy United States Trade Representative; (5) the Commissioner of Customs; and (6) the Under Secretary of Commerce for International Trade.[10] NIPLECC's authorizing legislation did not include the FBI as a member of NIPLECC, despite its pivotal role in law enforcement. However, according to representatives of the FBI, USPTO, and Justice, the FBI should be a member. USPTO and Justice cochair NIPLECC, which has no independent staff or budget. In the council's nearly 4 years of existence, its primary output has been three annual reports to the Congress, which are required by statute.

According to interviews with industry officials and officials from its member agencies, and as evidenced by its own legislation and reports, NIPLECC continues to struggle to define its purpose and has had little discernable impact. Indeed, officials from more than half of the member agencies offered criticisms of NIPLECC, remarking that it is unfocused, ineffective, and "unwieldy." In official comments to the council's 2003 annual report, major IPR industry associations expressed a sense that NIPLECC is not undertaking any independent activities or effecting any

[10]NIPLECC is also required to consult with the Register of Copyrights on law enforcement matters relating to copyright and related rights and matters.

impact. One industry association representative stated that law enforcement needs to be made more central to U.S. IPR efforts and said that although he believes the council was created to deal with this issue, it has "totally failed." The lack of communication regarding enforcement results in part from complications such as concerns regarding the sharing of sensitive law enforcement information and from the different missions of the various agencies involved in intellectual property actions overseas. According to an official from USPTO, NIPLECC is hampered primarily by its lack of independent staff and funding. According to a USTR official, NIPLECC needs to define a clear role in coordinating government policy. A Justice official stressed that, when considering coordination, it is important to avoid creating an additional layer of bureaucracy that may detract from efforts devoted to each agency's primary mission.

Despite its difficulties thus far, we heard some positive comments regarding NIPLECC. For example, an official from USPTO noted that the IPR training database Web site resulted from NIPLECC efforts. Further, an official from the State Department commented that NIPLECC has had some "trickle-down" effects, such as helping to prioritize the funding and development of the intellectual property database at the State Department. Although the agency officials that constitute NIPLECC's membership meet infrequently and NIPLECC has undertaken few concrete activities, this official noted that NIPLECC provides the only forum for bringing enforcement, policy, and foreign affairs agencies together at a high level to discuss intellectual property issues. A USPTO official stated that NIPLECC has potential but needs to be "energized."

Other Coordination Mechanisms

Other coordination mechanisms include the National International Property Rights Coordination Center (IPR Center) and informal coordination.[11] The IPR Center in Washington, D.C., a joint effort between DHS and the FBI, began limited operations in 2000. According to a DHS official, the coordination between DHS, the FBI, and industry and trade associations makes the IPR Center unique. The IPR Center is intended to serve as a focal point for the collection of intelligence involving copyright and trademark infringement, signal theft, and theft of trade secrets. However, the center is not widely used by industry. An FBI official

[11] Another coordination mechanism is the IPR Training Coordination Group, led by the State Department. This voluntary, working-level group comprises representatives of U.S. agencies and industry associations involved in IPR programs and training and technical assistance efforts overseas or for foreign officials.

associated with the IPR Center estimated that about 10 percent of all FBI industry referrals come through the center rather than going directly to FBI field offices. DHS officials noted that "industry is not knocking the door down" and that the IPR Center is perceived as underutilized.

Policy agency officials noted the importance of informal but regular communication among staff at the various agencies involved in the promotion or protection of intellectual property overseas. Several officials at various policy-oriented agencies, such as USTR and the Department of Commerce, noted that the intellectual property community was small and that all involved were very familiar with the relevant policy officials at other agencies in Washington, D.C. Further, State Department officials at U.S. embassies regularly communicate with agencies in Washington, D.C., regarding IPR matters and U.S. government actions. Agency officials noted that this type of coordination is central to pursuing U.S. intellectual property goals overseas.

Although communication between policy and law enforcement agencies can occur through forums such as the NIPLECC, these agencies do not systematically share specific information about law enforcement activities. According to an FBI official, once a criminal investigation begins, case information stays within the law enforcement agencies and is not shared. A Justice official emphasized that criminal law enforcement is fundamentally different from the activities of policy agencies and that restrictions exist on Justice's ability to share investigative information, even with other U.S. agencies.

Enforcement Overseas Remains Weak and Challenges Remain

U.S. efforts have contributed to strengthened foreign IPR laws, but enforcement overseas remains weak. The impact of U.S. activities is challenged by numerous factors. Industry representatives report that the situation may be worsening overall for some intellectual property sectors.

Weak Enforcement Overseas

The efforts of U.S. agencies have contributed to the establishment of strengthened intellectual property legislation in many foreign countries, however, the enforcement of intellectual property rights remains weak in many countries, and U.S. government and industry sources note that improving enforcement overseas is now a key priority. USTR's most recent Special 301 report states that "although several countries have taken positive steps to improve their IPR regimes, the lack of IPR protection and

enforcement continues to be a global problem." For example, although the Chinese government has improved its statutory IPR regime, USTR remains concerned about enforcement in that country. According to USTR, counterfeiting and piracy remain rampant in China and increasing amounts of counterfeit and pirated products are being exported from China.

Although U.S. law enforcement does undertake international cooperative activities to enforce intellectual property rights overseas, executing these efforts can prove difficult. For example, according to DHS and Justice officials, U.S. efforts to investigate IPR violations overseas are complicated by a lack of jurisdiction as well as by the fact that U.S. officials must convince foreign officials to take action. Further, a DHS official noted that in some cases, activities defined as criminal in the United States are not viewed as an infringement by other countries and that U.S. law enforcement agencies can therefore do nothing.

Challenges to U.S. Efforts

In addition, U.S. efforts confront numerous challenges. Because intellectual property protection is one of many U.S. government objectives pursued overseas, it is viewed internally in the context of broader U.S. foreign policy objectives that may receive higher priority at certain times in certain countries. Industry officials with whom we met noted, for example, their belief that policy priorities related to national security were limiting the extent to which the United States undertook activities or applied diplomatic pressure related to IPR issues in some countries. Further, the impact of U.S. activities is affected by a country's own domestic policy objectives and economic interests, which may complement or conflict with U.S. objectives. U.S. efforts are more likely to be effective in encouraging government action or achieving impact in a foreign country where support for intellectual property protection exists. It is difficult for the U.S. government to achieve impact in locations where foreign governments lack the "political will" to enact IPR protections.

Many economic factors complicate and challenge U.S. and foreign governments' efforts, even in countries with the political will to protect intellectual property. These factors include low barriers to entering the counterfeiting and piracy business and potentially high profits for producers. In addition, the low prices of counterfeit products are attractive to consumers. The economic incentives can be especially acute in countries where people have limited income. Technological advances allowing for high-quality inexpensive and accessible reproduction and distribution in some industries have exacerbated the problem. Moreover,

many government and industry officials believe that the chances of getting caught for counterfeiting and piracy, as well as the penalties when caught, are too low. The increasing involvement of organized crime in the production and distribution of pirated products further complicates enforcement efforts. Federal and foreign law enforcement officials have linked intellectual property crime to national and transnational organized criminal operations. Further, like other criminals, terrorists can trade any commodity in an illegal fashion, as evidenced by their reported involvement in trading a variety of counterfeit and other goods.[12]

Many of these challenges are evident in the optical media industry, which includes music, movies, software, and games. Even in countries where interests exist to protect domestic industries, such as the domestic music industry in Brazil or the domestic movie industry in China, economic and law enforcement challenges can be difficult to overcome. For example, the cost of reproduction technology and copying digital media is low, making piracy an attractive employment opportunity, especially in a country where formal employment is hard to obtain. The huge price differentials between pirated CDs and legitimate copies also create incentives on the consumer side. For example, when we visited a market in Brazil, we observed that the price for a legitimate DVD was approximately ten times the price for a pirated DVD. Even if consumers are willing to pay extra to purchase the legitimate product, they may not do so if the price differences are too great for similar products. Further, the potentially high profit makes optical media piracy an attractive venture for organized criminal groups. Industry and government officials have noted criminal involvement in optical media piracy and the resulting law enforcement challenges. Recent technological advances have also exacerbated optical media piracy. The mobility of the equipment makes it easy to transport it to another location, further complicating enforcement efforts. Likewise, the Internet provides a means to transmit and sell illegal software or music on a global scale. According to an industry representative, the ability of Internet pirates to hide their identities or operate from remote jurisdictions often makes it difficult for IPR holders to find them and hold them accountable.

[12]See GAO, *Terrorist Financing: U.S. Agencies Should Systematically Assess Terrorists' Use of Alternative Financing Mechanisms*, GAO-04-163 (Washington, D.C.: Nov. 14, 2003).

Industry Concerns

Despite improvements such as strengthened foreign IPR legislation, international IPR protection may be worsening overall for some intellectual property sectors. For example, according to copyright industry estimates, losses due to piracy grew markedly in recent years. The entertainment and business software sectors, for example, which are very supportive of USTR and other agencies, face an environment in which their optical media products are increasingly easy to reproduce, and digitized products can be distributed around the world quickly and easily via the Internet. According to an intellectual property association representative, counterfeiting trademarks has also become more pervasive in recent years. Counterfeiting affects more than just luxury goods; it also affects various industrial goods.

Conclusions

The U.S. government has demonstrated a commitment to addressing IPR issues in foreign countries using multiple agencies. However, law enforcement actions are more restricted than other U.S. activities, owing to factors such as a lack of jurisdiction overseas to enforce U.S. law. Several IPR coordination mechanisms exist, with the interagency coordination that occurs during the Special 301 process standing out as the most significant and active. Conversely, the mechanism for coordinating intellectual property law enforcement, NIPLECC, has accomplished little that is concrete. Currently, there is a lack of compelling information to demonstrate a unique role for this group, bringing into question its effectiveness. In addition, it does not include the FBI, a primary law enforcement agency. Members, including NIPLECC leadership, have repeatedly acknowledged that the group continues to struggle to find an appropriate mission.

The effects of U.S. actions are most evident in strengthened foreign IPR legislation. U.S. efforts are now focused on enforcement, since effective enforcement is often the weak link in intellectual property protection overseas and the situation may be deteriorating for some industries. As agencies continue to pursue IPR improvements overseas, they will face daunting challenges. These challenges include the need to create political will overseas, recent technological advancements that facilitate the production and distribution of counterfeit and pirated goods, and powerful economic incentives for both producers and consumers, particularly in developing countries. Further, as the U.S. government focuses increasingly on enforcement, it will face different and complex factors, such as organized crime, that may prove quite difficult to address.

With a broad mandate under its authorizing legislation, NIPLECC has struggled to establish its purpose and unique role. If the Congress wishes to maintain NIPLECC and take action to increase its effectiveness, the Congress may wish to consider reviewing the council's authority, operating structure, membership, and mission. Such considerations could help NIPLECC identify appropriate activities and operate more effectively to coordinate intellectual property law enforcement issues.

Mr. Chairman, this concludes my prepared statement. I would be pleased to respond to any questions that you or other members of the committee may have at this time.

Contacts and Acknowledgments

Should you have any questions about this testimony, please contact me by e-mail at yagerl@gao.gov or Emil Friberg at friberge@gao.gov. We can also be reached at (202) 512-4128 and (202) 512-8990, respectively. Other major contributors to this testimony were Leslie Holen, Ming Chen, and Sharla Draemel.

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Chairman TOM DAVIS. Thank you. Let me ask you. The internal pressures from these countries as they start to develop more and gain more IP within their countries, they are going to really be conflicted, the governments, at that point, aren't they?

Mr. YAGER. That is right. I think one of the things that we recognized much more when we went abroad is that there are often situations where the United States can gain the support of certain groups within those countries and help them make their own points and be effective within their internal systems. The United States obviously needs those kinds of domestic allies in those foreign nations in order to be effective. The Brazilian example of music is one, but also with many of the manufactured goods such as cigarettes, their domestic manufacturers are losing because those goods are being produced outside of the country and brought in, and obviously the jobs and the wages and all the other benefits that go with that production is lost.

Chairman TOM DAVIS. My impression is that the economics over the long-term takes care of this as these countries get to a higher level of industrialization and into the IP markets, but we can hasten that with good protection, writing good rules, and pressures on the government. And in the meantime, of course, innocent companies like this one in Connecticut that was cited by Representative Simmons, go by the wayside, and it is not fair. So I think we need to take a look at the long-term, but in the short-term we need to just keep the pressure on.

Your report praises the Special 301 review process. Are there any interagency lessons that can be learned from the success of the Special 301 process?

Mr. YAGER. Well, that is really a good question. I think that one of the things that we observed that is good about the Special 301 process is, one, it is credible. They have used the strongest form of protection on a number of occasions, and they have found countries like the Ukraine and, earlier, Paraguay and China, at the highest level and put them on the list, which put the United States in a position of being able to use sanctions. So the process has credibility because they have shown that they are willing to use it.

A second thing about it is that it really does get the attention of U.S. agency officials, foreign officials, and the industry one time a year to try to revisit this issue. So it brings together the right people; they take a look at the evidence, they revisit the kinds of issues and the changes from the last year. So that is another characteristic of this particular effort that we think makes it successful.

And, finally, the right people are involved. You have all the major trade agencies, as well as some of the domestic technology agencies, the patent office and things like that. These groups are all involved.

So you have the right people, the mechanism seems to be working, and I think even the threat of sanctions with the Special 301 seems to be having a good effect in capturing people's attention both in the United States, as well as abroad, and getting some effective changes.

Chairman TOM DAVIS. I just got a notice off the wires. This is an Associated Press story that says, "Bootleg wares account for between 50 percent to 90 percent of the products on Russian shelves,

depending on the category of goods," Leonid Vetenoff, the Deputy Chief of the Interior Ministry's Public Order Department told TAS, "billions, tens of billions of dollars of fake goods are in circulation." He says, "Russia has taken some measures," he said, "but piracy is still rife." I am going to ask unanimous consent to put this story in the record. But he notes that "While Russia has its own booming counterfeit industry, fakes are mostly imported from Southeast Asia, Bulgaria, and the Ukraine, with some smuggled in from Poland."

So, as you note, everybody is having problems, without some kind of world order on this.

[The information referred to follows:]

2 of 5 DOCUMENTS

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September 23, 2004, Thursday, BC cycle

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HEADLINE: Counterfeit goods remain major problem in **Russia,** police official says

DATELINE: MOSCOW

BODY:

Russians' appetite for **counterfeits** costs manufacturers tens of billions of dollars each year, a senior police official said Thursday.

Bootleg wares account for between 50 percent to 90 percent of the products on Russian shelves, depending on the category of goods, Leonid Vedenov, deputy chief of the Interior Ministry's public order department told the ITAR-Tass agency.

"Billions, tens of billions of dollars 1/8of fake goods 3/8 are in circulation," Vedenov said.

Russia has taken some measures to combat counterfeiting, including confiscating **counterfeits** worth some 1.3 billion rubles ($45 million) this year and opening 4,000 criminal cases.

But piracy is still rife. Weak legislation combined with flabby police enforcement mean that, more often than not, counterfeiters walk free.

Clothes, household chemicals, perfumes and audiovisual products are among the bootleggers' most popular targets, ITAR-Tass said.

"A legal CD costs 150 to 240 rubles ($5 to $8)and a **counterfeit** one a mere 80 rubles ($2.70)," Vedenov said.

He noted that while **Russia** has its own booming **counterfeit** industry, fakes are mostly imported from Southeast Asia, Bulgaria and Ukraine, with some smuggled in from Poland.

The United States has frequently lambasted **Russia** for its record on intellectual property rights, with U.S. Ambassador Alexander **Vershbow** warning that the issue could impede **Russia's** bid to join the World Trade Organization. The U.S. Trade Representative's Office has also considered revoking certain tariff breaks if **Russia** doesn't step up efforts to combat violations.

LOAD-DATE: September 24, 2004

Mr. YAGER. That is right.

Chairman TOM DAVIS. Your report offered criticism of the NIPLECC and says that the group lacks impact. What can we do to make it work? As we noted, the Senate has put money into the budget to strengthen it, but if you don't change the organization, sometimes money alone doesn't solve the problem. What can we do to make this work, given that the Special 301 process seems to work well in bringing agencies together?

Mr. YAGER. Well, I think your first question also had to do with what are the characteristics that make the Special 301 so successful, and think about how those could be applied to the NIPLECC, because obviously it has not been successful. So a couple of things we raised in our report as potential areas to focus on.

One is a change in membership, because as we note in the report, despite the FBI's importance in law enforcement efforts, both domestically as well as abroad, the FBI is not included in NIPLECC. So that is obviously an oversight and that needs to be considered.

A second thing is that at this point the NIPLECC has no authority or staffing, so one of the issues that you mention is the fact that now, at least in the Senate bill, there is a chance to give them some funding to have an organization. That certainly could be a way to provide them with additional impetus and get more done.

Third, there was an issue about their mission. It doesn't seem clear from a lot of the materials that they have put out, both their annual reports as well as their call for public comment on their mission, that they have really established what it is that they should be doing within this process. As we mentioned, the USTR-led Special 301 process gets a lot of the key players involved to talk about the policy issues, but if this is supposed to be an operational group rather than a policy group, then I think that mission has to be clarified.

I think the final thing that I would mention is that we have to consider the nature of those agencies and any cultural or legal constraints that prevent them from effectively sharing information within a forum like the NIPLECC. And we have some recommendations that we put in prior reports, particularly to the FBI, because we found in other reports that the FBI does not necessarily collect and analyze and share information the way that you would like them to do in a group like the NIPLECC.

So this is quite similar to an issue that we brought up in a report that was published 1 year ago, where we have made a recommendation to the FBI that they do a better job of systematically analyzing the information and making it available to others in order to try to prevent this kind of activity.

Chairman TOM DAVIS. And, last, what role does litigation play in enforcing intellectual property rights? I am talking about suing abroad, not just suing here. Could industry use civil litigation abroad as an effective tool to fight the intellectual property piracy, or are the courts just as corruptible and out of touch on this as the governments seem to be enforcing it sometimes?

Mr. YAGER. I think certainly many of the representatives of the private sector would have some direct experience on that, but my comment on that is that it would depend greatly on the country

that you are dealing with, as to whether the legal protections are there and whether using the judicial system would be the most effective way to go about trying to curb these kinds of efforts. Obviously, that could be a very costly route, it could be a very time-consuming route, so before those kinds of efforts are made and those kinds of expenditures are made, you would have to see whether that in fact is the best way to combat that crime.

Chairman TOM DAVIS. Thank you very much.

Ms. Norton, any questions?

Ms. NORTON. Thank you very much, Mr. Chairman.

Thank you, Dr. Yager, for your testimony. I must say that I despair of our ability to get a hold of this kind of piracy either through law enforcement efforts or diplomatic efforts. There does seem to be open season on the intellectual property of those who have invested so much and taken the leadership in our own country. The extent to which technology seems to make giant leaps forward, while we do what we can to catch up with it is at the major reason that I wonder at our ability to get a hold of this kind of piracy.

In light of that, I guess I have two questions. One relates to your last comment about whether law enforcement efforts usually, of course, are seen not as systemic efforts in the first place, are worthwhile, because the GAO has called for the increased use of FBI agents trained in IPR in embassies abroad, and I wonder whether or not we are looking at a deterrent effect if there was law enforcement. And I think your notion of whether or not this is the best place to put whatever resources we have is an important question, so I would like to know why train the FBI agents. How could they be used in a way to leverage or galvanize that use?

But then I would like to ask you, in light of how technology moves ahead far faster than we can catch up to what it allows in piracy, I turn to what a university here in this city has done, I think a number of universities have begun to do across the country, and to realize that fighting to catch up with the pirates will leave you not a step behind, but miles behind.

So, I don't know, G.W. makes available some of the CDs to youngsters. The industry has tried prosecuting some, high-profile prosecutions, so people know you are home-free just because you are a student. But then some of the universities are saying let us try an approach that gives some access to try to ward off some of the piracy which we think is going to go on in any case.

Now, I can't come out of my head with analogies in the intellectual area. I guess it is the basic concept I am asking about. So first I want to know how FBI agents, since you recommend their training and use, are likely to be used; and, second, whether there is any analogy that you can think of to what some of the universities have been doing, because they have just been given up, essentially, on high-profile prosecutions, warnings, you are going to be expelled; no, no, no, that is not ethical. All of that seems not to have worked enough, so they have found this way. I don't know if it is working, but I would like to know your thoughts on that and what potential it may or may not have in the international sphere.

Mr. YAGER. Let me answer your first question by saying that one of the things that we have noticed is that there is the potential for

not just criminals and other profitmaking entities to use counterfeiting and other types of alternative financing mechanisms, but there is also the possibility that terrorists might be using these same kinds of ways to either earn assets, for example, outside of the United States and then shift them to other parts of the world.

So one of the things that we did in a report that came out about a year ago, and we are actually further pursuing this particular issue, is the extent to which terrorists might be using these kinds of methods to fund their own activities. And for that reason we think that some of the training and some of the activities that are the highest priority for these law enforcement agencies, such as Homeland Security and the FBI, are already putting them in a position where they may have information and they may be collecting information which could be very useful to this particular effort.

And as I mentioned before, we have a report that came out, and one of the things that we recommended to the Federal Bureau of Investigation was that they do a better job of analysis. In particular, we said, they should establish a basis for an informed strategy to focus resources on the most significant mechanisms that terrorists use to finance their activities. Certainly, counterfeit goods are one potential way that they can earn money for those types of activities.

So I think that some of the agencies are in fact pursuing very similar kinds of issues. They may be doing it for terrorist reasons, but while they are doing that they could be collecting information which could be quite useful to other U.S. agencies or, in some cases, to foreign entities to pursue. So we may actually have the information in the agencies, but at this point it is not being effectively analyzed and it has not been distributed or communicated with other groups. So we think there are some opportunities there. We are still working with the FBI as to whether they will fully implement this particular recommendation, but I think it goes to some of the points that you raised.

With regard to the changing economics and the changing technology and the effect that this might have on the strategies that are either led by the U.S. Government or also by the industry associations, it is certainly clear that the technology is creating new challenges, particularly in some of the digital areas. And I am sure that some of the industry representatives can talk further about this, but our view was that the main problem at this point in the four countries that we visited was still the production of manufactured goods such as CDs and DVDs, which certainly has been made easier through digitalization of all these products.

They haven't even gotten to the point where downloading is a problem because most of the people in those countries do not have access to high speed equipment that would make that kind of an option available. But that certainly would not be far off for some of these countries, and there is just no question that the industry and the government have to adapt their enforcement priorities to try to adjust and to counter the new types of techniques that now are available to them, and other techniques that will be available in the near future.

Chairman TOM DAVIS. Thank you.

The gentlelady's time has expired.

Mrs. Blackburn.

Mrs. BLACKBURN. Thank you, Mr. Chairman. I do have just a couple of little questions I wanted to get to.

In your report, page 41, the footnote, you reference the Trade Secrets Act as a potential hindrance to IPR enforcement, and I would like for you just to touch on that and talk about why you would see that as a barrier. At the same time, let us go on and talk about what other components of the legal process could be either a help or a hindrance.

Mr. YAGER. OK, with regard to the Trade Secrets Act, there really are two issues that could prevent this kind of complete sharing of information between not just U.S. agencies, but U.S. agencies and foreign counterparts, and a couple of those have to do either with the Trade Secrets Act or also the fact that many of these investigations are ongoing.

And there may actually be quite a bit of activity that is related in one way or another to IP allegations or problems, but those are not in the public domain because those could be involved with ongoing investigations, and obviously much of that information cannot be released, particularly in a public forum. So there could be quite a bit of activity and some of that legitimately cannot be shared during the investigations.

But we think that there are additional opportunities to provide that information, even within these law enforcement agencies. They could be looking at their own information internally to look for patterns to see whether there are opportunities to see that all of a sudden you are seeing more activity, for example, in a particular type of counterfeiting, or that kind of money all of a sudden seems to be shifting its locus of production from one country to another.

Because one of the things that we noticed in doing the work in the Ukraine and observing the effects of the pressure on the Ukraine to reduce its copyrighting and pirating problems, that many of those factories appeared to have moved to Russia as a result and are now operating out of Russia. So having agencies that have a bigger picture view of where this activity is is certainly important in trying to reduce their activity.

Mrs. BLACKBURN. Let us go back to the example of Mr. Simmons' constituent, Mr. Blackburn, who I will say for the record is no relation to me at all, or to my husband. But finding the source, being able to pinpoint the specific factory in the specific province that is replicating your product, is there a barrier there that would prohibit them from being able to find that information in a timely manner and have an avenue of recourse?

Mr. YAGER. I think that would depend on a number of issues on the specific case. For example, if it is a large manufacturing outfit and if, for example, the products are fairly sophsticated products, then I think there would be a much greater chance to be able to go and trace and find that particular manufacturing outlet, because it is not easy to move those things around. So there might be opportunities, for example, in large-scale manufacturing, whether it is of gauges or even of cigarettes, where the scale of operation would be so large that you would have time to go back, find that factory and try to take action against it.

Unfortunately, that is not the only type of activity that we are talking about here. Some are just a matter of people having some DVD or CD burners in an apartment and doing this on a very small scale. And in situations like that, going to the source and trying to shut that down would be enormously difficult.

Mrs. BLACKBURN. Well, I appreciate that, and I think the Golden Sciences Technologies case out of Hong Kong was something we were glad to see come to completion, and then of course the sentencing there.

I want to just touch on one other thing. What are we not doing that we ought to be doing to be certain that agents can spot the counterfeit goods, because they are rampant and it is a matter of learning what you are looking for? And when the chairman and I were on the CODEL, which we have referenced, and I spent some time in Hong Kong and went to a market area, within 45 minutes someone from the embassy and I listed over 50 items that I knew were knock-off, fraudulent, counterfeit items.

Mr. YAGER. There are some challenges in identifying some of these products. The better the fake, obviously the more expertise that you might need to try to identify it. In some cases you can walk up to the shop and look at the items and realize immediately that they are knock-offs, but that is obviously not true in all cases.

We think that there are some opportunities to improve the training and technical assistance that U.S. agencies provide to their counterparts, including being able to spot those things and then how to pursue leads to find the actual producers and the suppliers. The United States has been actively pursuing those kinds of training and assistance activities but we did feel that there could be some improvements there.

For example, it doesn't appear that they are checking back to see whether the people that have taken these training courses or benefited from U.S. assistance are actually using those systematically to improve their domestic jurisdictions. In addition, we feel that important agencies, such as USAID, are not working closely with the other agencies to ensure that they are hitting the most high-priority items. So we think that among their training and technical assistance activities there are some opportunities for making better use of those dollars.

Chairman TOM DAVIS. OK. Thank you very much.

Yes, ma'am, Ms. Watson.

Ms. WATSON. I want to thank you, Chairman Davis, for convening this particular panel.

As Chair of the Congressional Entertainment Caucus and a member representing a number of entertainment studios in Los Angeles, the protection of our U.S. intellectual property rights abroad is extremely important to me and many of my constituents that are working in the industry. Indeed, the health and vitality of the entertainment sector is critical to the overall health of our economy, since it contributes an estimated $535.1 billion to the U.S. economy, and that happened in the year 2001; and it remains one of our Nation's biggest export sectors.

Since I have been here, I have tried to champion greater protection of U.S. IP products, both domestically and abroad, and earlier this year I introduced H.R. 576, a bill urging the Chinese Govern-

ment to take further and immediate steps to improve the IPR mechanism, especially in the enforcement of such rights, by changing and updating its criminal law and enforcement procedures. China, a country featured in the GAO report, has one of the worst records in the world on intellectual property rights violations. It is now subject to an out-of-cycle review by the USTR in the year 2005. And I am delighted that our chamber has recognized the importance of global IPR enforcement by passing my resolution on China in July, but we must do more.

So the release of the GAO cannot be more timely. The existing mechanisms among the U.S. agencies to coordinate efforts by global IPR protection have been instrumental in advancing foreign laws and enhancing international obligations. Yet the losses from piracy and counterfeiting of U.S. IP products, from film, recorded music, published products and software, pharmaceuticals, electronic equipment, industrial products, research results, to auto parts and even cars themselves, continue to undermine American creativity and threaten our economy. IPR theft has reached epidemic levels in many countries around the world, and our Government must step up efforts to protect U.S. intellectual property with greater resources and a prioritized focus on enforcement.

I look forward, Director Yager, to what you are doing regarding how the National Intellectual Property Law Enforcement Coordination Council, as created by this Congress, can play a greater role. And I am sorry to have come in late, and I am sure that the first part of your testimony addressed a lot of what I am asking for, particularly the first panel.

But equally important are the initiatives by private industries to enforce and protect their own intellectual property products abroad. So the testimony from the trade associations today on the response to the GAO report and its recommendations, and how Congress can further implement their initiative with new legislative efforts, I am really interested in hearing about. I think progress is being made. I want to thank you for what has been done to this point, and I just have a couple of questions that you might want to address in light of my statement.

The first one is what is the level of coordination between Federal agencies and organizations, such as the World Intellectual Property Organization [WIPO], in updating and implementing strong IP laws in developing in underdeveloped countries? That is No. 1.

And why hasn't the National IPR Coordination Center, consisting of the FBI and the DHS officials, focused on the collection of intelligence involving IP infringement, and why has this not been utilized by the IP industry? And how can Congress encourage greater public-private partnership, especially through formal coordination in which Federal moneys have already been invested in the staffing of the resources?

So if you would address those two concerns, it will satisfy my inquiry.

Mr. YAGER. Yes, Representative Watson. On three things, actually, let me respond. We have actually also done a lot of work which relates specifically to China's compliance with its entry into the WTO. And certainly when we did the work, both at the initial time at compliance, we identified about 55 paragraphs in its docu-

ment which had reference to intellectual property. Certainly this was something that was of primary importance to those who negotiated this for the United States.

In addition to that, when we went to China and talked to businesses about what their biggest issues are, IPR is always at the top of that list. So we have reported that in some of the reports that we have done on China's commitments, and we will certainly continue to do that. We have an additional report coming out on China relatively shortly.

With regard to your two questions, let me talk briefly about the IPR Center. We did talk to a number of the agencies, as well as to some of the industry officials, about the effectiveness of the IPR Center. We got very mixed views on that. There were some who told us that it had an important role to play, but that one of the things that happened was that information was provided to the IPR Center, but nothing ever came out of it.

So it was difficult for them to tell whether there was action being taken on this kind of information or just what was happening after they made the effort to inform them. So I think it would probably be a very good question to ask of the industry to find out what do they think about a center that does seem to be interested in their information, but ultimately they get very little back from it. So I think that is one of the issues that could be brought up.

As to the use of some of these international organizations such as WIPO, it was certainly our indication that the United States is by far the most aggressive pursuer of intellectual property rights and changes abroad, and I think that is one of the reasons why, in addition to participating in groups like the WIPO, that the United States is also working very hard with its Special 301 process and with some bilateral agreements to try to enforce and better improve intellectual property protection abroad. I don't know that those kinds of efforts really move quickly enough for the USTR or, in fact, for the Congress, to be putting all of your efforts into those areas, and that is why there is so much emphasis on the Special 301 process.

Ms. WATSON. Do I still have some more time, Mr. Chairman?

Chairman TOM DAVIS. No, your time has expired.

Ms. WATSON. Can I just raise one issue?

Chairman TOM DAVIS. Without objection.

Ms. WATSON. OK, thank you.

We were in Athens for the Olympics this summer, and I was in a neighborhood where they had a swap meet, and one of the Greek citizens said, oh, I will take you down there. Well, I was amazed. I could get every CD that is available in my local store for 2 and 3-year-olds. And I pointed it out to my friends, I said, look at this piracy. I mean, they had every latest hit. This was over in Athens, and I understand all you needed to do was go to Turkey to get anything in the world that was copied.

So we have a real serious problem, and I have been working with WIPO, which is a subsidiary of the United Nations, on these issues, and whatever we can do legislatively, we are here, and I am particularly interested through my caucus. I just wanted to mention that.

Mr. YAGER. Yes. It certainly is not hard to find these things, and I think the whole emphasis of the hearing is that enforcement is really now the key: to try to get others to understand the importance of this, gain their support from domestic interest groups, and try to move forward that way.

Chairman TOM DAVIS. Thank you very much.

Mr. Ruppersberger.

Mr. RUPPERSBERGER. Thank you, Mr. Chairman. This is a very important issue, as we know.

Marsha Blackburn, I know this is very important to you, and I have learned a lot from being with you on the issue that is happening in Tennessee, with all of your companies.

We have talked about all the stories. We have talked about China here today. Recently, one of my staff persons was in China, and it was amazing to him the amount of bootleg DVDs that were on the street. I believe Spiderman 2, that just came out in August, was on the street in China and looked like professional packaging.

So we talk about China or other countries passing laws, but what about the enforcement issue? And I think right now the figure—and you might correct me—is close to $25 billion that we are losing throughout the world as far as piracy, that U.S. business are losing. And if that is the case, we really have a tough issue.

Now, what is the root of piracy? If you look at it, it is a cultural issue, I am sure. The black market allows any entrepreneurial person to come in and provide a service, and the products and demand. So let us ask ourselves if we are doing enough to educate consumers about not purchasing illegal products.

Are we educating the international governments, not only China, but there is a long list of governments? And until we start setting a strategy to deal with the cultural issue, because as long as there is a demand, people are going to buy something cheaper; that is just the way it is going to be throughout the world. So do we need to focus more on enforcement? That is an issue that we have to deal with.

Let me ask you this. Do our trade imbalances force out U.S. goods because of excessive tariffs?

Mr. YAGER. OK, let me make a couple comments on what you have said. I think what is interesting is that you said that many of these movies are available very soon after their release. In fact, in some cases they are available even before the release in Hollywood, which shows that somehow these products are getting out there, and it is really quite startling how fast they are put into distribution through these counterfeit methods.

In terms of the dollar value of losses associated with piracy, we actually looked into the numbers that had been printed and provided by USTR of $200 to $250 billion as potential losses, as well as some of the other numbers. It is enormously difficult to come up with a good estimate of just what the losses are. We certainly know that they are enormous; they are obviously of policy significance; they do mean jobs and production in the United States.

But it is very difficult to try to estimate how many goods would be sold at legal prices in those countries. So for that reason I think all the estimates need to be taken with a certain grain of salt and certain amount of caution, because it is enormously difficult to

come up with a particular dollar value. We tried to find the source of some of the numbers, the $250 billion number, but we actually were not able to do that, and we spent some time trying to track that down. But, in any case, we obviously know that the number is a very large one and the losses are very large and they are obviously of policy significance, so we didn't do anything in terms of trying to estimate that number.

In terms of the cultural issues, one of the items that I mentioned earlier in my statement was that trying to gain the support of many of the local groups and the local companies within these other countries is obviously very important, because there could be these interests that the United States shares with producers in these other countries. So by allowing them to also voice their concerns and the problems associated with piracy, whether it is a loss of tax revenues for the governments, whether it is a loss of production in jobs for the companies, I think it is very important for the United States to look to allies in those countries to try to gain their support in order to have a more effective campaign to really convince people in those countries that it is in their interest to not buy counterfeit goods.

Mr. RUPPERSBERGER. OK, two other things, because my light is coming on. I want to know whether you feel that the trade imbalances force out U.S. goods because of excessive tariffs, and do we need to look at that. And the other thing, before my red light comes on, we have talked about countries that we are having problems with throughout the world. Is there any example of a country that is working with us where we have been able to turn around the culture and where we could look to as a model to try to develop a program that works? So if you could answer those two questions.

Mr. YAGER. In terms of the excessive tariffs, I do not believe that is really the issue in this industry. I think the fact is that many of these goods are relatively high priced. When you look at the median income for many of the people around the world that are currently purchasing some of these illegal goods, the prices that are being charged in countries like Brazil and Russia and the Ukraine, the legal prices are relatively high. So one of the issues there is that some of these goods are possibly priced out of the range of the typical consumer in some of these countries.

And the other question was? I am sorry.

Mr. RUPPERSBERGER. Is there a country out there. We talk about all the problems. Even though China has passed laws, it really hasn't done a lot; there hasn't been a lot of enforcement. Is there a country we could look to that we have worked with where we feel that we are doing a good job as it relates to this issue?

Mr. YAGER. I think that by looking at that Special 301, even some of the efforts that have gone on within the Ukraine have been positive. They have become much more aggressive at trying to shut down some of those big producing firms. Many of these countries have in fact passed laws. I think there is also a directive by 22 nations, although it doesn't seem like a lot of countries, that all government agencies are required to use legitimate goods.

Mr. RUPPERSBERGER. But why does it work there and not in other places?

Mr. YAGER. Well, that is a good question. I think again it has to do with gaining support of those domestic industries in order to be effective.

Mr. RUPPERSBERGER. So more of a domestic industry than it is government-to-government.

Mr. YAGER. I think both have to be involved. In order to be effective in enforcement, there has to be that domestic support for this kind of activity, because if these kinds of groups don't feel it is in their own interest to pursue it, then it is not going to be very effectively pursued.

Mr. RUPPERSBERGER. OK, thank you.

Chairman TOM DAVIS. Mr. Cooper, any questions?

Mr. COOPER. Yes, please.

Let us cut to the chase. Companies in Nashville, TN and companies across America are being robbed blind by many of the nations across the world, some of whom call themselves our allies. The GAO has come up with a report that, in my opinion, largely whitewashes the issue. We have contributed to some strengthened laws in other nations, but when you say challenges remain, we are still being robbed blind, whether it is music, movies, pharmaceuticals, you name it. Intellectual property is the greatest store of wealth on the plant, and we as a Nation have not figured out how to protect that adequately.

You say, in the summary of your report, "Competing U.S. policy objectives take precedence over protecting intellectual property in certain regions." In other words, we chicken out in protecting U.S. property rights in certain nations for other reasons. And, granted, property rights are not the only interest that we have, but this has lasted for so long and it has been so systematic, and our efforts even to document the problem pale in comparison to the problem. So I am worried that GAO—and you are a fine person and it is a fine agency—we are going to study this thing to death; meanwhile, American jobs are being shipped overseas, the American economy is being seriously damaged, and no real effective action is taking place.

I would love to see the Secretary of State here, top administration officials really doing something about the problem, not just talking about it again, as we have done for so many years, because this has to stop. And I don't see any real hope that you are offering here today; we will study it some more, we will look at it, we will try to do incrementally, here and there, some things. But in the end this administration has largely allowed other policy considerations to take precedence. Previous administrations have allowed other policy considerations to take precedence. Meanwhile, we are still being robbed blind.

So why can't we do more about this? Why can't this Government take more action, firmer action, more successful actions to stop theft of property wholesale, widespread, systematic theft of property? That is what this hearing is really about. What are we going to do about it? What is this administration going to do about it?

Mr. YAGER. We certainly agree that enforcement is the challenge. I think that is the key point that you are making. I did outline some comments in the beginning of the hearing where we talked about the kinds of changes that could be made to this coordinating

group, the NIPLECC, that has the responsibility for trying to achieve greater levels of cooperation within the U.S. law enforcement community as well as between the U.S. law enforcement community and their counterparts abroad. We certainly mentioned in our report that group is not working well; it is not functioning effectively and it has very little to show for its first 3 or 4 years of operation.

So we think that by pointing out the kinds of systems that have been effective, which is the Special 301, and contrasting it to a group that has clearly not been effective, despite the fact that the enforcement is the area that is of greatest importance right now, we feel that that is a step forward in trying to focus the government's attention and activities on a mechanism that is not working.

Mr. COOPER. Most Americans have never heard of the agency you describe. You say it has not been especially effective. That is bureaucratese for saying it has been an abject utter failure after three or 4 years. Why can't we do better? Where is the FBI? Where is the CIA? I don't know, call in other agencies so that it can get the attention it deserves, because American companies and the American people should no longer be robbed blind by nations around the world, some of whom call themselves our allies.

Mr. YAGER. We agree that there needs to be attention on this NIPLECC. We have a matter for congressional consideration in which we basically are saying to the Congress that this particular group has not been effective, it has failed, and it needs to have attention by the Congress, because ultimately some of the things that should be required are outside the bounds of what the agencies can do alone.

For example, the membership. Congress would have to authorize or instruct the FBI to become a member of this group. Those are the kind of things that we have directed and we have pointed out in the report which we feel would make some forward progress and make this group more effective in the area of enforcement, where it is obviously needed.

Mr. COOPER. Isn't there a warning label on every U.S. videotape, FBI warning, copying this tape or whatever brings sanctions? Why is that only on U.S. videotapes only used against American efforts to copy these tapes? What is the deal?

Mr. YAGER. Well, we have some examples over on the table which show just how close the copies are, and in some cases I believe they do include the same kind of warning labels that exist domestically. But I think the issue is whether people pay attention to those warning labels; and the answer right now is that in many countries they do not.

Chairman TOM DAVIS. Thank you.

The gentleman's time has expired.

Mr. COOPER. Thank you, Mr. Chairman.

Chairman TOM DAVIS. One of the problems is the labels on there, but people think they are legitimate.

Mr. YAGER. Right.

Chairman TOM DAVIS. You don't know for sure, when you are buying it out there in the marketplace.

Mr. YAGER. In some cases that is true. In some cases it is pretty clear, when you are buying something in a little cellophane bag, that it is a pirated copy.

Chairman TOM DAVIS. In China we could buy a whole bag of just the alligators for Izod, and then you could sew them on the shirts, or you could buy the shirts with the Izod on them. I don't think they know anything about it.

Well, thank you very much. I appreciate your being here. Your report has been very, very useful to us.

We will take a 2-minute recess as we move to our third panel.

Oh, I am sorry. Mr. Cummings, did you have any questions?

Mr. CUMMINGS. No, thank you, Mr. Chairman.

Chairman TOM DAVIS. OK, we will move to our third panel at this point. We will take a 2-minute recess.

[Recess.]

Chairman TOM DAVIS. We are now going to move to our third panel and hear from the industry members. We have Joe Papovich here, the senior vice president of the International Recording Industry Association of America; John Malcolm, the senior vice president of Worldwide Anti-Piracy from the Motion Picture Association of America; and Robert Cresanti, who is the vice president for public policy for the Business Software Alliance.

It is our policy to swear you in. If you would just rise and raise your right hands.

[Witnesses sworn.]

Chairman TOM DAVIS. Thank you very much for your patience. You have heard the previous testimony, being here with us today. Your entire statements are going to be part of the record; they are already in the record. So questions will be based on this, but we will give you about 5 minutes to kind of sum up what is important, and then we will move to questions.

Mr. Papovich, we will start with you, then we will move on down the line. Thank you for being with us.

STATEMENTS OF JOSEPH PAPOVICH, SENIOR VICE PRESIDENT-INTERNATIONAL, RECORDING INDUSTRY ASSOCIATION OF AMERICA; JOHN G. MALCOLM, SENIOR VICE PRESIDENT AND DIRECTOR FOR WORLDWIDE ANTI-PIRACY OPERATIONS, MOTION PICTURE ASSOCIATION OF AMERICA; AND ROBERT CRESANTI, VICE PRESIDENT, PUBLIC POLICY, BUSINESS SOFTWARE ALLIANCE

Mr. PAPOVICH. Thank you, Mr. Chairman and members of the committee. Thank you very much for focusing Congress's attention on the devastating impact of piracy and the actions our Government should take to address this enormous problem. As you pointed out, I am the senior vice president for International at RIAA. I also worked for 21 years at the Office of the U.S. Trade Representative, the last 9 of which I handled these issues there. So I have been on both sides of the issues, as has Mr. Malcolm.

RIAA's members create, manufacture, and distribute 90 percent of all the legitimate sound recordings produced and sold in the United States. The United States is the world's biggest producer of intellectual property products and services. It is our Nation's comparative advantage. It is something we do better than any other

nation. Copyright industry exports and foreign sales approach $90 billion a year. That is even despite the piracy.

The 1980's and 1990's were terrific decades for music sales, and then things went south for our industry. There are three reasons. The first was the increased involvement of organized criminal syndicates in the production and global distribution of pirate CDs and other optical disc products. These syndicates quickly shift their activities to the most accommodating country and they use the complexity of multi-jurisdictional law enforcement to their advantage.

The second was the widespread proliferation of what is called CD burners, that made it so very easy to reproduce high-quality sound recordings and for criminal syndicates to further diversify the manner in which pirate materials are replicated and distributed. The third was and is the wave of illegal file sharing on the Internet, caused by a surge of decentralized peer-to-peer networks. In rough terms, the combination of growing global physical piracy, illegal CD burning, and Internet piracy generated a 20 percent sales decline in our industry since 1999.

The impact of the revenue crash has been even more profound in human and creative terms. There has been successive rounds of job losses at our member companies: 1,000 jobs were lost at Warner Music in March, another 1,500 at EMI, last year Sony cut 1,000 jobs, 1,500 jobs were lost at Universal in less than 2 years. The creative cost is even more troubling. Artist rosters are being slashed dramatically as companies no longer can afford to carry as many dreams as they did in the past.

My testimony sets out the many efforts we make to combat piracy in other countries. In the world of physical piracy, our enemy is the organized criminal syndicates who mass-produce our recordings and governmental indifference or corruption in other countries that enables these syndicates to thrive. We cannot combat this double whammy on our own; we need Government's help to protect our Nation's comparative advantage.

We get as much help as current government resources permit, and I mean current U.S. Government resources permit. The problem is not indifference by our Government, the problem is that piracy and counterfeiting abroad are so pervasive and the resources that our Government makes available are so small.

In addition, as was pointed out by Congressman Cooper, our issues sometimes do become casual to use abroad or foreign policy concerns. We recommend that Congress elevate the status of international intellectual property protection in the executive branch and expand the human and financial resources made available to combat this nasty problem. We offer these suggestions.

First, do two things at USTR: one, elevate the status of trade-related intellectual property at USTR and create a special stand-alone intellectual property office; second, provide sufficient IP staffing at USTR in order to obtain better and more up-to-date commitments from our trading partners and to ensure that such commitments are enforced.

Second, ensure that Commerce, the Patent and Trademark Office, and State have adequate resources to assist USTR and to carry out their own functions in this area.

Third, consider elevating the State Department's Intellectual Property Division to an office level status so that it has the necessary resources to ensure that intellectual property is adequately considered in our Nation's foreign policymaking.

Fourth, provide additional and new financial resources to the State Department's INL Bureau for intellectual property capacity-building in other countries.

Fifth, direct FBI agents in relevant U.S. embassies to become more involved in copyright piracy matters.

And sixth, expand the ability of U.S. Customs to intercept imports of piratical product.

On behalf of the music community, we appreciate your focus on the piracy problem and welcome the opportunity to work with you on this. Thank you very much.

[The prepared statement of Mr. Papovich follows:]

Testimony of Joseph Papovich

Senior Vice President International

Recording Industry Association of America

Before the

United States House of Representative

Committee on Government Reform

September 23, 2004

Mr. Chairman, Ranking Member and other Members of the Committee, I appreciate the opportunity to testify today about intellectual property piracy.

I am Senior Vice President International for the Recording Industry Association of America, the trade group that represents the U.S. recording industry. RIAA's mission is to foster a business and legal climate that supports and promotes our members' creative and financial vitality. Our members are the record companies that comprise the most vibrant national music industry in the world. RIAA members create, manufacture and/or distribute approximately 90% of all legitimate sound recordings produced and sold in the United States. Prior to obtaining my current position, I served for 21 years in the Office of the U.S. Trade Representative. From 1994 until 2003, I led USTR's intellectual property efforts. So I am familiar with the subject of today's hearing from industry's and government's perspective.

Music is the world's universal form of communication. It touches every person of every culture on the globe to the tune of $32 billion annually, and the U.S. recording industry accounts for more than one-third of that world market. Our members create employment for thousands of people, including singers, musicians, producers, sound engineers, record promoters and retail salespersons, to name only a few.

The importance of the U.S. recording industry, and intellectual property protection, to the U.S. economy

An important part of our nation's competitive strength lies in the creation of knowledge-intensive intellectual property-based goods and services. This is one of those economic activities that Americans do better than the people of any other nation. The "core" U.S. copyright industries account for more than five per cent of US GDP. The foreign sales and exports of U.S. copyright industries were nearly $90 billion in 2001, an amount greater than almost any other industry sector, including automobiles and auto parts, agriculture and aircraft.

Therefore, international markets are vital to our companies and our creative talent. Exports and other foreign sales account for over fifty percent of the revenues of the US record industry. This strong export base sustains American jobs.

In this respect, the protection of our intellectual property rights abroad is vital to promoting America's competitive advantages in world commerce. As our trade deficit has soared, we call upon Congress to consider more closely the relationship between our widening trade and current account deficits and copyright piracy and to take steps to enable us to more effectively protect our intellectual property rights and to sell our products at home and abroad.

In a sense, the intellectual property of the United States is like a warehouse of ideas and creativity. For people to walk in and steal them is no more tolerable than theft of physical goods. And the sale of our recordings abroad makes a major contribution to America's current account balances. Each and every sale of a pirated product abroad that substitutes for the sale of a legitimate American product increases our current account deficit. As a result, Americans employed in competitive industries like ours are denied financial benefits that should have occurred but did not.

The Effect of Music Piracy

The piracy of music is almost as old as the music industry itself, but historically it was difficult for the criminal to reproduce copies as good as the real thing. Now with the advent of digital recordings criminals can reproduce perfect copies of any recording. There is massive manufacture and traffic of illegal CDs, both in the form of molded CDs that are produced in large plants, and increasingly CD-R's produced on blank optical discs with readily available computer CD-R burners

The illegal music trade is feeding the profits of international organized crime syndicates who are involved in drugs, money-laundering and other criminal activities. Music piracy is costing governments hundreds of millions of dollars in tax revenues.

In 2003, pirates sold 1.7 billion units of recorded music; worth an estimated $4.5 billion—at pirate prices. Pirated optical discs accounted for 1.1 billion of these. Globally, 2 in 5 recordings are pirate copies. Total optical disc manufacturing capacity (video / audio CDs, CD-ROMs and DVD) – stands at well over 40 billion units, having quadrupled in the past five years and greatly exceeds legitimate demand. This creates a business environment ripe for exploitation by criminal syndicates, often shielded by governments hostile or indifferent to our interests. Given that pirate operations have few or none of the overhead costs associated with genuine production, the profit margins are incredible.

The battle against intellectual property theft must be unrelenting. Digital technology and internet piracy have greatly exacerbated our problems. Our country must employ every

tool at its disposal, including the critically important leverage provided by international trade agreements.

RIAA's 2004 Overall Priority Issues and Countries

Our priority countries are the biggest markets for pirate CDs--Russia, Brazil, Mexico and China. The emergence of commercial scale CD-R piracy is localizing pirate production, and forcing a change in anti-piracy strategies away from exclusively trying to control production and towards control of consumption (i.e. the offer for sale of pirate products in the marketplace). In addition, the rapid growth of the internet and personal CD-R burning as mechanisms for the unauthorized distribution of recorded music, is having the same impact as commercial piracy even though the individual actor may not be acting with any profit incentive, or possessing what one would ordinarily think of as "criminal intent."

In sum, we need more attention and resources dedicated to enforcement, both in the physical and on-line environments.

With respect to physical piracy, we need:

1. Adoption of optical disc regulations (requiring the use of source identifier—known as "SID" codes—in territories producing large quantities of pirate discs, or where the production capacity vastly exceeds legitimate needs--e.g. Russia, Thailand, Pakistan, Indonesia;

2. To ensure that criminal penalties are adequate in law and implemented in practice to serve as a deterrent in light of the fact that any fine, no matter what size, can be absorbed as a cost of doing business;

3. To amend criminal laws to make copyright offenses cognizable under organized crime and criminal conspiracy provisions, thus giving governments better investigative tools and resources in order to fight organized piracy;

4. To criminalize the provision of raw materials in furtherance of piracy; and

5. To ensure that law enforcement officials have "ex officio" authority to seize any infringing materials, and that they are directed to seize, without complaint from the copyright owner, any materials that are offered for sale. (This is necessary in light of the practical inability to control piracy by focusing exclusively on the suppression of illegal production--efforts need to be diversified to include market control).

With respect to on-line piracy, we need:

1. To secure ratification and implementation of the WIPO Copyright Internet Treaties to ensure that adequate rights are established online;

2. To ensure that ISP's are required by law to engage in reasonable business practices with respect to the detention and removal of infringing files, or by preventing access to their networks on the part of known infringers;

3. To amend criminal laws so that they apply to internet "piracy"--both by ensuring the application of principles of vicarious liability and contributory infringement, and most importantly by applying criminal penalties to acts undertaken WITHOUT any commercial purpose when they are done on a commercial scale, like making materials available through the internet as was done in the US via the Net Act; and

4. To increase the ability of law enforcement agencies from different countries to cooperate with each other in multi-territorial cases, including by securing broad adherence to the Cybercrime Convention.

Recording Industry Actions to address Piracy

Through our international affiliate, the International Federation of Phonographic Industries, or "IFPI", the recording industry maintains a global anti-piracy team of investigators and analysts, made up largely of ex-law enforcement personnel who develop civil litigation and work with law enforcement personnel in pursuit of criminal prosecutions. We also have an active online anti-piracy program. We work in close collaboration with governments, police forces and customs departments worldwide.

We are engaged in extensive educational efforts, designed to increase public understanding of the value of intellectual property and to improve overall awareness of copyright laws, on a global basis.

We work closely with national and international bodies to encourage adoption of laws that strengthen copyright protection and promote an environment in which our industry can continue to innovate.

Record quantities of discs and equipment were seized in 2003. An estimated 56 million pirate music discs—up from 13 million in 2001—were seized, while seizures of all formats, including cassettes and music DVDs, totaled 64 million units. The vast majority of seizures were in South East Asia and Latin America.

Enforcement actions are being concentrated at the source of pirate operations where we aim to confiscate manufacturing equipment and not merely pirate product, thereby imposing more significant "costs" to pirate operations. In 2003, our industry seized over 12,000 CD "stampers"—the master copy used to press illicit CDs. This is six times the number seized in 2002. There was also a substantial increase in the number of CD-R burners seized—nearly 15,000 in 2003 compared to just 5,000 in 2002.

Forensic analysis

We maintain a unique forensics laboratory at the IFPI headquarters in London that traces the manufacturing source of pirate CDs through microscopic examination and measurement. This has helped link infringing discs to source factories and resulted in many raids on suspect plants worldwide. This in turn encouraged several governments including Malaysia, Poland, Bulgaria and Russia to establish their own forensic programs.

This Committee should be aware that the recording industry is not sitting back and waiting for others to act. We are investing millions of dollars around the world to protect our products, but we are battling forces far beyond our ability, acting alone, to solve. First, government corruption in many other countries denies us any possibility of criminal or civil justice. In addition, and perhaps as part of this, there is a well-established link between piracy, organized crime, and even international terrorism which uses music piracy to divert huge sums of money to other criminal enterprises. Recent testimony by a Mafia boss from Forcella, Naples (February, 2003), clearly illustrated that the Mafia are directly involved in the production and distribution of pirate music, carving up the territory between various gangs and paying a share of profits to 'godfathers'.

The Importance of the U.S. Government to our industry

America's music composers, performers and producers could not survive in the battle against piracy, domestic and international, but for the absolutely critical and splendid assistance that we have received over the past 15 years from the United States Government, Executive and Legislative branches—Republican and Democrat.

We rely heavily upon our government for our very survival in combating the plague of music piracy. The U.S. Government does more than any other government in protecting its nation's intellectual property, and does so with vigor and determination, albeit with limited resources.

Since the passage of the 1988 Omnibus Trade and Competitiveness Act, intellectual property issues have been an integral part of our country's international trade agenda. When it comes to U.S. Government efforts in this regard, it all starts at the Office of the U.S. Trade Representative. USTR develops, coordinates and implements our nation's trade policy. With its small but highly dedicated staff of only 200 individuals, USTR provides leadership and negotiating expertise in nearly all trade policy areas.

It is in the context of the massive size and scope of our nation's international trade activity that we look for help in protecting our nation's creative wealth. Of course, USTR is not tasked with doing all these things alone. Its mission is to develop, coordinate and implement our nation's trade policy in conjunction with other relevant and highly interested agencies, including the Departments of State, Justice, the FBI, the Department of Homeland Security—particularly Bureau of Customs and Border Protection, and the Department of Commerce and, within Commerce, the U.S. Patent and Trademark Office, as well as the Copyright Office in the Library of Congress.

Ultimately, helping us battle piracy abroad requires the involvement of these and other agencies of the U.S. Government, including the Ambassadors and officers in many of our embassies abroad.

Existing Tools for Addressing International Piracy Problems

Congress has already provided several "tools" for our government to use in helping us better protect our intellectual property abroad, many of which are well described in the GAO Report that is the subject of today's hearing.

Special 301: This is an extremely important tool to us. This annual review and report, mandated by the 1988 amendments to the Trade Act of 1974, requires USTR, with the active assistance of these other agencies, to identify foreign countries that deny adequate and effective protection of intellectual property rights or fair and equitable market access for U.S. persons that rely on intellectual property protection.

This annual review is an outstanding tool for leveraging other countries into making needed improvements to their intellectual property laws and/or enforcement. It also serves as the mechanism for the executive branch to set its annual agenda for how it will address intellectual property matters in our bilateral, regional and multilateral trade relationships, and how it will allocate its resources in combating intellectual property problems globally.

USTR and the other agencies do a very good job with the limited resources available to them, but there is little doubt that this program would be more effective if there were additional resources. For example, an extremely effective aspect of Special 301 is conducting "out-of-cycle" reviews of selected countries over the course of the year, and other less structured but intensive bilateral engagement. Otherwise, some countries conduct a flurry of activity prior to April 30 in order to avoid an undesirable designation in the report, then turn a blind eye to piracy once the report is issued. This can be remedied by re-visiting the most problematic countries over the course of the year by announcing that they will be reviewed again after a certain number of months. However, limited resources at several agencies, including at USTR, have limited the utilization of the very effective tool of out-of-cycle reviews.

"GSP" Trade Benefits: Another important tool in our trade policy arsenal is the conditioning of the grant of duty-free importation to developing countries under the Generalized System of Preferences (GSP) on adequate and effective intellectual property protection in such countries. The law authorizes the President to suspend or revoke all or part of a country's GSP benefits if he determines that it denies adequate and effective intellectual property protection to U.S. right-holders. In the past, suspension of such benefits has been an extremely effective tool in achieving meaningful IPR improvements in these countries. We have pending petitions to suspend GSP benefits for Russia, Brazil, and other countries. An important decision regarding Brazil is due at the end of September. We hope the Administration will act upon our petitions, unless of course these countries make meaningful and sustained progress prior to this date.

The TRIPS Agreement in the WTO: An important multilateral tool is active U.S. Government participation in the World Trade Organization's Agreement on Trade-Related Intellectual Property Rights, or the "TRIPS Agreement. All 146 members of the WTO are obligated to provide and enforce minimum standards of intellectual property protection to all the other members. If they fail to do so, the WTO provides an effective dispute resolution process that provides with imposition of trade sanctions against countries that fail to comply with TRIPS obligations. The TRIPS Agreement, which came into effect in 1995, ensured that scores of countries adopted and committed to enforce fairly modern, substantive copyright laws. This was a tremendous achievement. Monitoring full implementation of the TRIPS Agreement, and aggressive use of WTO dispute settlement against non-compliance, remains a top priority for our association and our members.

The WIPO Digital Treaties: Digital technology, much of which came onto the market after the TRIPS Agreement came into effect, has brought many changes and challenges to international trade and perhaps none more so than with respect to the protection of intellectual property rights. In this new digital environment, entertainment products, legitimate and pirated, can be transmitted across the internet in perfect digital form from one corner of the globe to another in a matter of seconds. Revolutionary new technologies of this nature sometimes demand that new rules be included in the agreements that govern trade between nations.

Two significant treaties to this effect were concluded at the World Intellectual Property Organization in 1996. Ratification and implementation of these treaties is a high priority for our organization. We are pleased that our government has made achieving ratification of these treaties an important element of its bilateral intellectual property agenda.

Bilateral Trade Agreements: The Administration's ambitious agenda to negotiate bilateral free trade agreements has proven to be an excellent mechanism for achieving legally-binding bilateral obligations from certain trading partners to ensure that digitized content and transmissions are correctly and adequately provided full copyright protection. The FTAs negotiated thus far with Jordan, Singapore, Chile, Australia, Morocco, Bahrain and five Central American countries and the Dominican Republic under the CAFTA address this urgent need. We look forward to significant improvements in addressing rampant copyright piracy in such countries as Thailand, Colombia, Bolivia and Peru, in ongoing FTA negotiations. The FTA negotiating process is the best avenue currently available to us for ensuring that these important digital copyright issues are adequately addressed. We praise USTR, Commerce, PTO, the U.S. Copyright Office and other agencies for doing so and congratulate them for achieving significant results in these negotiations.

The record industry is currently confronting a piracy situation, both on and off line, that requires the significant revision of laws, and it is necessary to address these in a time sensitive manner or we risk further declines in US revenue and jobs. As a consequence, we fully endorse negotiations undertaken on a bilateral, and occasionally regional, basis.

This is extremely time and resource consuming—but absolutely necessary if we are to preserve the US economic competitiveness created by American ingenuity, know how, and creativity. We thus strongly support the negotiation of free trade agreements to introduce laws and practices consistent with the needs of today's business world, and trust that reforms achieved in this manner will ultimately lead to global solutions.

We also obviously have major music piracy problems in countries with which the U.S. Government is not negotiating free trade agreements. China, Russia, Taiwan, Brazil, and Pakistan are particularly egregious examples, but there are many others. It thus is critically important that the U.S. Government have adequate resources to actively press these countries using the tools already granted by Congress. The U.S.-China Joint Commission on Commerce and Trade concluded this past April included potentially significant new commitments by China in this regard. But significant follow-up efforts are required to ensure that China lives up to these commitments.

Technical Assistance and Training: In an effort to promote the protection of intellectual property rights (IPR) worldwide, the Department has approved six projects to provide urgently needed training, programs and equipment to better protect American intellectual property. These projects are the first tranche of $2.5 million to be spent on IPR training to help protect intellectual property overseas. The State Department's Bureau of International Narcotics and Law Enforcement Affairs and the Bureau of Economic and Business Affairs selected the projects after conferring with industry, other Federal agencies, our overseas missions, and Congress. The second tranche of funding for the balance of the $2.5 million will be announced and obligated before the end of this fiscal year. The first six projects are for Paraguay, Thailand, The Asia-Pacific Cooperation Forum, the Association of South East Asian Nations, Mexico, and the Central American Free Trade Agreement partner countries. We strongly support this program, and believe that it is essential for the US to help to build the capacity of governments to meet the variety of challenges that they confront in addressing criminal copyright enforcement.

Department of Justice Initiative: We have been greatly heartened by the Justice Department's "Operation Fastlink." Attorney General Ashcroft and his team deserve great credit for this unprecedented 10 country crackdown on the pre-release CD "ripping" groups that make it sport to steal property even before it becomes commercially available. There is real promise to the new Justice Task Force on these matters under the able leadership of David Israelite.

Other Activities: Traditional diplomacy is also very important, bringing the weight to USG power to play quickly when we encounter foreign governments unwilling to enforce their laws against those pirating our products.

Cultural outreach is useful to help empower local cultural communities to lobby for IP protection. Education/technical assistance are also important. Beyond the simple transfer of information and enforcement methods, such training can reinforce links among IPR officials within a region and build working relations between US and foreign law enforcement.

Intelligence gathering/analysis is also increasingly important to deal with the organized criminal element or terrorist financing links associated with international piracy.

Proposals for Reform

First, given the critical nexus between intellectual property piracy and international trade, we propose that Congress elevate the status of international intellectual property protection on our nation's trade policy agenda. Here are our suggestions:

Improving USG's Ability to Measure and Address Countries' Compliance with International Obligations

1. Establish a new USTR office dedicated exclusively to intellectual property matters, led by an Ambassador, "chief negotiator" or at minimum an Assistant U.S. Trade Representative.

    - Increase IPR-dedicated professional staff in this office from the current three to six. Several of these individuals should be dedicated to enforcement-related matters, including with respect to existing multilateral and bilateral agreements.

2. Improve the State Department's capacity in international trade-related anti-piracy and counterfeiting activities.

    - Elevate the State Department Intellectual Property Division in the Economics Bureau to "Office-level" and provide it with sufficient additional resources to enable it to interact effectively with regional offices in the Department and with America's embassies abroad to more effectively address IPR-related concerns as a matter of diplomatic priority.

    - Provide additional and new financial resources for the State Department's Bureau of International Law Enforcement and Narcotics to provide enhanced technical assistance to non-OECD countries in the fight against piracy. Technical assistance should include both the provision of necessary equipment and the training of law enforcement and judicial officers. These resources should be administered in conjunction with the restructured intellectual property office at State as recommended above. The program was funded last year, and we are very encouraged by the early round of grant announcements.

Improving U.S. Law Enforcement's Capabilities to Address Piracy Domestically, Internationally and On-Line

3. Increase funding to the Department of Justice to permit:

    - The appointment of "operational" FBI agents tasked to work on criminal copyright matters in key US missions, notably Russia, Taiwan, Pakistan, Mexico,

Paraguay, China, Thailand, Malaysia and Brazil. Such work should be undertaken in close cooperation with FBI legal attaches to encourage sharing of investigative information and expansion of investigations into organizations' cross-border operations.

- Additional funding to the Department of Justice to ensure that it has increased ability to pursue all forensic analysis necessary to conduct and facilitate a global response to the global problem of on-line piracy.

4. Protecting our nation's borders from pirated imports must remain a critical part of an effective national plan to combat piracy. However, the Bureau of Customs and Border Protection (CBP) is insufficiently staffed to meet this need. Only seven attorneys in CBP's IPR Branch administer CBP's nationwide enforcement effort. As a result, too many cases are not being acted upon quickly enough. The agency could significantly increase its seizures and effectiveness with adoption of amended guidelines permitting more sharing of information with affected US rightholders and providing alternatives to recordation as a means of establishing ownership of rights. However, to utilize this new authority effectively, additional funding should be provided to significantly expand the number of attorneys in CBP's IPR Branch. The IPR Branch should create a special task force aimed at increasing the timeliness, effectiveness and number of IPR civil border seizures. Increased funding should also be provided to assure that the number of U.S. inspectors working in foreign ports is adequate to address intellectual property concerns alongside other important national priorities.

Chairman TOM DAVIS. Well, thank you very much.

Mr. Malcolm.

Mr. MALCOLM. Mr. Chairman, members of the committee, I would like to thank you for inviting me to testify before you today on this important topic of international intellectual property theft. As a former Deputy Assistant Attorney General at the Department of Justice who oversaw the Computer Crime and Intellectual Property Section, and as the current director of the Motion Picture Association of America's Worldwide Anti-Piracy Program, I have perhaps a unique vantagepoint that I would like to share with you with respect to this problem.

The copyright industries employ 3.5 percent of the American work force and earn more money abroad than automobiles, planes, and agriculture. The movie industry has a surplus trade balance with every single country in the world, and no other American industry can make that claim. Ensuring the continued economic health of the film industry and of other U.S. intellectual property rightsholders is in our national interest and in the interest of ordinary Americans, the costumers, the carpenters, the set painters, sound technicians, fire safety workers, whose jobs rely on the creation of filmed entertainment and other forms of copyrighted works.

I understand, Mr. Chairman, that you have in fact a brief videotape that shows this, and I would ask that you consider playing that at this time.

Chairman TOM DAVIS. All right.

[Videotape played.]

Mr. MALCOLM. Thank you for playing that, Mr. Chairman.

Chairman TOM DAVIS. Thank you. They show that at the movies, don't they? I think I have seen that at the theaters.

Mr. MALCOLM. Yes, they do.

Piracy, massive thievery, really, threatens the continuing viability of this important economic engine. Last year, our investigators participated in nearly 32,000 raids and seized over 52 million pirated optical discs. I fully expect the number of raids and seizures to go up significantly this year. Despite improvements in some markets and the often heroic efforts of our investigators, the worldwide piracy situation isn't getting better; it is getting worse.

With rare exceptions, the people procuring, producing, and distributing this pirated material are affiliated with large and dangerous international criminal syndicates and gangs. Camcorded copies of movies are reproduced on expensive replicators, costing well in excess of $1 million, that operate 24 hours a day, 7 days a week, cranking out thousands and thousands and thousands of pirated discs. These discs are then distributed by "mules" and through courier services to pirate stores and street vendors.

This is not being done by mom and pop operations; it is being done by business-minded thugs who fund this activity through money raised from other illicit activity such as drug dealing, gun running, and human trafficking, utilizing, by the way, the same distribution networks, and who, in turn, fund these other activities through the money they raise from piracy.

Drying up the funds and stopping the illegal activities of international criminal syndicates, gangs, and terrorist organizations are also obviously in our national interest.

There is also the exploding problem of movie piracy occurring on the Internet. Sophisticated international encoding groups, often referred to as warez groups, take a perverse pride in being the first to steal copyrighted material, stripping it of its protection, and then distributing it to their members, where it quickly finds its way onto peer-to-peer networks, often within 24 hours.

At any given moment there are 8.3 million people trading copyrighted material over the Internet, taking what does not belong to them and depriving artists and those who invest in them of the opportunity to make a reasonable return on their creative endeavors. Earlier this month, scientists were able to send 859 gigabytes of information halfway around the world in less than 17 minutes. At that speed, somebody can download a full-length feature film in 4 seconds.

Still, despite the grim realities that we face, I choose to see the glass as half full, rather than half empty. We are grateful to the Department of Justice and to the Attorney General for expanding the CHIP, which stands for Computer Hacking and Intellectual Property, program, and for establishing an Intellectual Property Task Force. We are also grateful for increased law enforcement efforts such as Operational Digital Gridlock, Operation Fastlink, and Operation Buccaneer, which help combat piracy and which shine a spotlight on this scourge, and which establish new contacts and strengthen old ones with law enforcement counterparts and other government officials overseas.

We commend the Department of Homeland Security's Bureau of Immigration and Customs Enforcement for its role in a recent unprecedented and successful joint operation labeled Operation Spring with the Chinese Ministry of Public Security that resulted in the arrest of six individuals, including a U.S. citizen, and the seizure and destruction of hundreds of thousands of pirated discs and the warehouses in which they were stored. We applaud all these efforts and pledge to do anything we can, anywhere, and at any time to support these and future investigative endeavors.

We have to continue to use every arrow in our quiver to combat this international crime problem, which threatens to cripple a vital part of our economy and which imperils our national security.

I have several specific recommendations which are contained in my written statement, which I realize is part of the record, that I would urge you to consider.

Mr. Chairman, I want to thank you again for inviting me to testify today and for your support over the years. I would be happy to answer any questions you may have.

[The prepared statement of Mr. Malcolm follows:]

TESTIMONY

OF JOHN G. MALCOLM

SR. V.P & DIRECTOR

WORLDWIDE ANTI-PIRACY OPERATIONS

MOTION PICTURE ASSOCIATION OF AMERICA

BEFORE THE

GOVERNMENT REFORM COMMITTEE

UNITED STATES HOUSE OF REPRESENTATIVES

"Intellectual Property Piracy: Are We Doing Enough To Protect U.S. Innovation Abroad?"

September 23, 2004

Mr. Chairman, Ranking Member, Members of the Committee:

I would like to thank you for inviting me to testify before you today on the important topic of international intellectual property theft, and I commend you for holding this hearing. As a former Deputy Assistant Attorney General who oversaw the Department of Justice's Computer Crime and Intellectual Property Section and as the current Director of the Motion Picture Association of America's worldwide anti-piracy program, I have, perhaps, a unique vantage-point from which to view this problem, and I am delighted to share my views with you.

Where are we now?

As I am sure you are all aware, the copyright industries employ 3.5 percent of the American workforce and have created jobs at a rate more than three times faster than the rest of the economy. They earn more money abroad than automobiles, airplanes, and agriculture. The movie industry has a surplus trade balance with every single country in the world, and no other American industry can make that claim. Ensuring the continued economic health of the film industry, and of other U.S. intellectual property rightsholders, is in our national interests and in the interest of ordinary Americans -- the costumers, the carpenters, the set painters, the sound technicians, the fire safety workers, whose jobs rely on the creation of filmed entertainment and other forms of copyrighted works.

Piracy, massive thievery really, threatens the continuing viability of this important economic engine. As I am sure you are aware, the Motion Picture Association of America (MPAA) and its international counterpart the Motion Picture Association (MPA) operate anti-piracy programs in over 60 countries. Last year, working in cooperation with local law enforcement officials, our investigators participated in nearly 32,000 raids and seized over 52 million pirated optical discs. I fully expect the number of raids and seizures to go up significantly this year. Despite the best, and often heroic, efforts of our investigators, and despite improvements in some markets, the worldwide piracy problem isn't getting better; it is getting worse.

With rare exceptions, the people procuring, producing, and distributing this pirated material are affiliated with large and dangerous international criminal syndicates and gangs. Camcorded copies of movies are reproduced on expensive replicators, costing well in excess of a million dollars, that operate 24 hours a day, seven days a week, cranking out thousands upon thousands of pirated discs. The discs are then distributed by "mules" and through courier services to pirate stores and street vendors. This is not being done by mom-and-pop operations. It is being done by business-minded thugs who fund this activity through money raised from other illicit activity such as drug dealing, gun running, and human trafficking (utilizing the same distribution networks), and who, in turn, fund these other activities through the money they raise from piracy. Pirated movie discs are readily available throughout the world, including in towns and cities throughout the United States, and the odds are high that every dollar,

pound, peso, euro or rupee spent on them is put into the pockets of bad people who will spend it in a way which is not consonant with our safety and security.

Let me be clear, the people heading these organizations have no qualms whatsoever about resorting to violence or bribery to conduct their operations, and they play for keeps. One of our investigators in Russia has been shot at; one of our investigators in Mexico had his wife kidnapped by pirates; one of our investigators in Malaysia, after being repeatedly threatened, had to move to a secure location after watching a pirate slash the face of her maid with a knife in a case of mistaken identity; and one of our investigators in Thailand had to escape from his car which had been forced off a bridge by pirates into a rushing river. I am proud to say that all of them continue to work for the MPA. They are dedicated and tough individuals, and I think about them every day when I go to work.

As I am sure you are aware, Ron Noble, the Secretary General of Interpol, has said on several occasions that the links between organized crime groups and intellectual property theft are well established and that there is increasing evidence that intellectual property crime is becoming the "preferred method" of funding for some terrorist groups. While alarming, this is hardly surprising given the fact that piracy is hugely profitable and, compared with other forms of illegal activity, far less risky. I do not believe that it is a coincidence that some of the largest exporting countries for pirate movie products are countries like Pakistan, Malaysia, and Indonesia, where terrorist organizations are

known to operate. Drying up the funds and stopping the illegal activities of international criminal syndicates and terrorist organizations are also, obviously, in our national interests.

There is also the exploding problem of movie piracy occurring on the Internet at online auction houses, pirate websites, over peer-to-peer networks, and through the sale of so-called ripper products that strip away encoded copyright protection from legitimate products. As you know, the Internet is seamless and borderless. Sophisticated international encoding groups, often referred to as warez groups, take a perverse pride in being the first to steal copyrighted material, stripping it of its protection, and then distributing it to their members, where it quickly finds its way onto peer-to-peer networks, often within 24 hours.

It was recently estimated that at any given moment, there are 8.3 million people trading copyrighted material over the Internet, taking what does not belong to them and depriving artists, and those who invest in them, of the opportunity to make a reasonable return on their creative endeavors. Earlier this month, it was reported that scientists at the California Institute of Technology, working with CERN (the European Organization for Nuclear Research) and others were able to send 859 gigabytes of information halfway around the world in less than 17 minutes. At that speed, somebody could download a full-length feature film in four seconds.

Still, despite the grim realities that we face, I choose to see the glass as half full, rather than half empty. We are grateful to the

Department of Justice and to the Attorney General for expanding the CHIP (Computer Hacking and Intellectual Property) program, and for establishing an Intellectual Property Task Force. We are also grateful for increased federal law enforcement efforts such as Operation Digital Gridlock, Operation Fastlink, and Operation Buccaneer, which help combat piracy, which shine a spotlight on this scourge, and which establish new contacts and strengthen old ones with law enforcement counterparts and other government officials overseas. We commend the Department of Homeland Security's Bureau of Immigration and Customs Enforcement (ICE) for its role in an unprecedented joint operation labeled Operation Spring with the Chinese Ministry of Public Security that resulted in the recent arrests of six individuals, including a U.S. citizen, and the seizure and destruction of hundreds of thousands of pirated discs and the warehouses used to store them. We applaud all these efforts and pledge to do anything we can, anywhere, at any time to support these and future investigative endeavors.

Sad to say, despite these recent efforts, international piracy shows no signs of abating, and more needs to be done. We must continue to use every arrow in our quiver to combat this international crime problem, which threatens to cripple a vital part of economy and which imperils our national security.

Where should we go from here?

Law Enforcement

It is vital that federal law enforcement agencies continue the progress that they have begun to make in combating domestic and

international intellectual property theft, and that the U.S. government continue to send the strong message to other nations that it recognizes the importance of intellectual property and that it addresses the theft of intellectual property with the same rigor that it addresses other types of serious economic crime. Accordingly, the MPAA recommends that this Committee provide increased funding to the FBI's cyber division and to other law enforcement agencies involved in the fight against piracy so that those agencies can hire and train tech-savvy agents who should be dedicated to investigating IPR crimes.

In that regard, the Committee might consider the appointment of "operational" FBI agents tasked to work on criminal copyright matters in key US missions, notably Russia, Taiwan, Pakistan, Mexico, Paraguay, China, Thailand, Malaysia, and Brazil. Such work should be undertaken in close cooperation with FBI legal attaches to encourage sharing of investigative information and expansion of investigations into organizations' cross-border operations.

Similarly, this Committee should adequately fund the forensics labs utilized by law enforcement agencies that investigate IPR crimes so that they are equipped to examine in a timely manner computers that are seized that often contain terabytes or even petabytes of information, including valuable leads that should be pursued.

Trade Tools

Aggressive use of trade tools, which play a critical role in establishing legal norms and which provide the impetus for foreign

countries to take their legal obligations seriously, should remain an essential part of our strategy to protect American intellectual property abroad. The Special 301 process, including "out of cycle" reviews, has proven itself to be an effective vehicle for industry to communicate its priorities for combating intellectual property problems to the U.S. Government[1] and for the U.S. Government to convey its own priorities to other governments, prompting many of those governments to take much-needed action.

The Generalized System of Preferences (GSP) represents another trade tool provided by Congress that has proven to be effective in motivating other countries to take their intellectual property obligations seriously. We hope that the U.S. Government will continue to show resolve by suspending GSP benefits in those instances in which countries fail to make meaningful and sustained progress in honoring their IPR commitments. USG agencies will review Brazil's continued eligibility for GSP at the end of this month. We hope Brazil will take forceful enforcement actions in the short time before this review is concluded to demonstrate a commitment to effective intellectual property enforcement. Without such action it would be very difficult to conclude that Brazil meets the eligibility requirements for continuing to receive preferential access for its exports to the United States.

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[1] For a full list of our concerns and priorities, I commend to you the 2004 Special 301 Report on Global Copyright Protection and Enforcement submitted by the International Intellectual Property Alliance on February 13, 2004, which is available electronically at http://www.iipa.com/special301_TOCs/2004_SPEC301_TOC.html.)

The conclusion of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights in May of 1994 established global standards for copyright protection that are supposed to be enforceable, although enforcement in many countries has proven to be spotty. We will continue to work with the USTR to find a good test for establishing effective TRIPS enforcement standards. Negotiations with countries that wish to join the WTO are another excellent tool for securing improved intellectual property. As Dan Glickman, MPAA's President and CEO, said yesterday at a public policy forum sponsored by Roll Call, "[Russia] need[s] to lower the incidence of copyright theft at home and stem the export of pirated goods before the United States should support Russia's accession to the WTO. This is the position that Bob Zoellick and his fine staff of trade negotiators have communicated to the Russian government, and it is a position supported by MPAA."

Over the past two years, USTR has negotiated a series of Free Trade Agreements that lift the international copyright standards to a new level, helping to ensure that our trading partners have the tools they need to help us address the ever-changing nature of the piracy problem. Collectively, the countries covered by the FTAs negotiated to date would constitute the eighth largest export market for our filmed entertainment, worth more than $742 million.

As just one example of the benefits of Free Trade Agreements, Australia committed to adopt effective procedures to enable content providers and Internet Services Providers to work together constructively to tackle Internet piracy. Internet piracy is our fastest

growing problem in Australia today – and the FTA gives us the tools to address it.

We recognize that USTR's resources have been stretched to the breaking point. We would urge this committee to enhance USTR's ability to meet its enforcement mandate by raising the profile of the intellectual property function at USTR, increasing its staffing levels and resources, and dedicating some staff specifically to the enforcement function.

Technical Assistance

We recommend that this Committee ensure funding for the technical assistance program managed by the State Department to assist foreign countries in the fight against international piracy. The State Department heads an informal coordination process for technical assistance that was rightly commended by the GAO report as an example of informal, voluntary, and effective coordination.

The State Department has fully allocated the $2.5 million earmarked in the 2004 budget. Each of the small projects receiving these funds is designed to address specific bottlenecks to effective enforcement; some of them will be managed directly by the U.S. embassies in key countries with serious IPR problems. For example, a regional program for Southeast Asia will fund Justice Department efforts to train prosecutors and judges on how to combat optical disc piracy, the biggest problem we face in that part of the world. The Senate Appropriations Committee included a five million dollar earmark in the Senate Foreign

Operations Appropriation for 2005, and we urge the House to accept the Senate earmark.

Traditional Diplomacy

Although necessary, the threat of trade sanctions is not sufficient to persuade recalcitrant governments to join us in the fight against international piracy. Not every problem is covered by a trade agreement or best addressed by the threat of sanctions. Oftentimes, the strategic deployment of high-level advocacy and diplomacy is the best way to get the job done.

The U.S. Commerce Department has demonstrated impressive leadership in ensuring that piracy remains at the top of our bilateral commercial agenda with key countries. The U.S. State Department, both through headquarters and the U.S. embassies, has also brought the weight of U.S. diplomacy to bear on international piracy problems. Both the Commerce Department and the State Department, working with the Justice Department, conduct training and capacity building in the area of intellectual property law and enforcement throughout the world. We encourage this Committee to do everything it can, including providing adequate funding, to see to it that both the Commerce Department and the State Department have what they need to continue providing leadership in promoting our economic interests and in protecting our national security.

Conclusion

Mr. Chairman, on behalf of the Motion Picture Association of America, as well as the thousands of law-abiding people who work in the movie industry and whose livelihoods are threatened by piracy, I want to thank you again for inviting me to testify today and for your support over the years. I would be happy to answer any questions you may have at this time.

Chairman TOM DAVIS. Thank you very much.

Mr. Cresanti.

Mr. CRESANTI. Thank you, Mr. Chairman. And thank you, members, for staying through this hearing.

Good afternoon. The theft of intellectual property, commonly known as piracy, is a matter of great concern to the business software industry. Piracy costs the industry billions of dollars in lost revenues each year; it reduces investment in creativity and it harms national economies, including our own.

The software industry is a remarkable engine of growth. I have submitted for the record two reports which we have produced over the last year detailing relevant economic statistics, one on the economic impact of software piracy and one that details the scope of the software piracy problem worldwide. Together, these studies dramatically illustrate how software piracy harms our economy.

The Business Software Alliance and its individual members devote significant resources to preventing piracy worldwide. First, we engage in extensive educational efforts designed to increase public understanding of the value of intellectual property, and improve the awareness of copyright laws on a global basis. We operate in almost 60 countries.

Second, we work closely with governments to encourage adoption of laws that strengthen copyright protection and promote an environment in which the software industry can continue to innovate. Finally, where appropriate BSA takes enforcement actions against those individuals who are engaged in the unlawful use, distribution, and sale of our member companies' software.

Clearly, industry cannot solve this issue alone; the Government has an essential role to play, both domestically and internationally. Investigation and prosecution of copyright piracy is an essential part of the solution to the piracy problem. BSA commends the Department of Justice for its increased emphasis on IPR and cybercrime enforcement.

This year, DOJ has carried out a number of major operations against Internet piracy. Operations Fastlink and Digital Gridlock particularly illustrate the importance of cooperation between domestic and foreign law enforcement bodies. Given the global nature of the problem, these are the steps that we think work. Adequate resources to investigate and prosecute IPR theft are essential in order to continue these successes.

As in the years past, BSA supports a congressional designation of DOJ funds directed at combating cybercrime and intellectual piracy. In addition, we support increased resources for FBI investigations of these crimes. There are other areas that could benefit from increased resources as well, and as you have noted, Mr. Chairman, Senator Gregg has taken a step in that direction. In the international arena, the U.S. Government has had great success in using a variety of tools, including those that link continued and expanded trade benefits with IP protection.

These efforts have been led by small, but dedicated professional staff at USTR. USTR has been ably supported in this work by State, Commerce, Justice Departments, while the U.S. PTO and the Copyright Office have often provided essential subject matter expertise.

These efforts should be enhanced by providing USTR with additional resources for negotiating and enforcing strong norms and obligations for the protection of intellectual property rights. BSA supports the creation of a new and separate intellectual property office within USTR, with an increased staff to enable USTR to continue to place the high priority on IPR negotiation and enforcement that it has in the past.

Similarly, BSA believes that a separate intellectual property office should be created within the Department of State. This would assist the State Department in continuing to place a high priority on ensuring foreign market access for U.S. intellectual property products and services, and compliance with international agreements protecting intellectual property rights.

Thank you for the opportunity to testify before you today, and I look forward to answering your questions.

[The prepared statement of Mr. Cresanti follows:]

Testimony of Robert Cresanti
Vice President, Public Policy
Business Software Alliance

before the
House Committee on Government Reform
September 23, 2004

Good afternoon. My name is Robert Cresanti. I am Vice President, Public Policy of the Business Software Alliance.[1] The Business Software Alliance is an association of the world's leading software companies. BSA's members create approximately 90% of the office productivity software in use in the U.S. and around the world.

I thank the Committee for the opportunity to testify here today. The theft of intellectual property, commonly known as "piracy," is a matter of great concern to the business software industry. Piracy costs the industry billions of dollars in lost revenues each year. It reduces investment in creativity and innovation. And it harms national economies including our own.

In my testimony, I will give a brief overview of the contributions that the business software industry has made and continues to make to the global economy and to describe how piracy has undermined those contributions. I will next describe the evolving challenges the software industry faces with respect to piracy and explain the steps industry is taking to address these challenges. Finally, I will summarize the lessons that we have learned regarding how best to end piracy both here at home and abroad, including certain steps the government can take to more effectively stem the tide of piracy.

First, I want to thank the members of the Committee for holding this hearing. BSA and each of its member companies commend you for recognizing the software industry's important contributions to the global economy and the serious threat posed to the industry by software piracy.

Software Industry Contributions and the Impact of Piracy

Information technology has changed the world in which we live. It has made us more efficient, more productive and more creative. Software has been at the heart of this technology revolution. Software facilitates the dissemination of knowledge, drives

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[1] *The Business Software Alliance (www.bsa.org) is the foremost organization dedicated to promoting a safe and legal digital world. BSA is the voice of the world's commercial software industry and its hardware partners before governments and in the international marketplace. Its members represent one of the fastest growing industries in the world. BSA programs foster technology innovation through education and policy initiatives that promote copyright protection, cyber security, trade and e-commerce. BSA members include Adobe, Apple, Autodesk, Avid, Bentley Systems, Borland, Cisco Systems, CNC Software/Mastercam, Dell, Entrust, HP, IBM, Intel, Internet Security Systems, Intuit, Macromedia, McAfee, Microsoft, RSA Security, SolidWorks, Sybase, Symantec, UGS and VERITAS Software.*

global communication and promotes continued innovation. It helps us to solve problems and generate new ideas, gives us the power to create and to collaborate and fosters self-expression in a range of spheres.

The software industry has also proven to be a remarkable engine for global economic growth. A recent economic survey (Attachment A) by IDC, the leading firm doing economic research and analysis for the information technology industry, reports that worldwide the IT sector employs more than nine million people in high-wage, skilled jobs, raises more than $700 billion in taxes annually and contributes nearly a trillion dollars each year to global economic prosperity. Between 1996 and 2002, the IT sector grew 26%, creating 2.6 million new jobs and adding a cumulative $6 trillion to economies around the world. Each year, the packaged software sector alone contributes $180 billion to the global economy.

This sector has yet to reach its full economic potential. This is due, in large part, to piracy. BSA has been releasing estimates of unauthorized use of software for over ten years. Because the market for software has changed over that time, this year BSA contracted with IDC to update and revise our study (Attachment B). After more than six months of research, IDC's results present what we believe to be an accurate landscape of software theft in the global marketplace. It is based on market data and in-the-field interviews with 5,600 industry professionals in 15 countries. With ongoing coverage of hardware and software markets in more than 65 countries, IDC had a broad and deep information base from which to develop piracy rates. They undertook a straightforward market measurement.

Last year, the world spent more than $50 billion for commercial packaged software that runs on personal computers. Yet, IDC concluded that software worth almost $80 billion was actually installed. For every two dollars' worth of software purchased legitimately, one dollar's worth was obtained illegally. As a result, IDC estimated a global piracy rate of 36 percent in 2003, with a U.S. rate of 22 percent.

Nearly one in every four copies of software in use in this country today, valued at nearly $6.5 billion, is stolen. Globally, more than one out of every three copies of software in use – nearly $29 billion worth – is stolen. There are few industries that could endure theft of its products at this level.

Of course, the impact of piracy extends beyond lost sales. Pirates steal jobs and tax revenues as well as intellectual property. The IDC economic impact survey cited above found, as a general rule, that there is an inverse relationship between software piracy rates and the size of the IT sector as a share of the gross domestic product. As piracy is reduced, the software sector grows. This creates a ripple effect that stimulates other parts of the IT sector and of the economy overall. The equation is a basic one: the lower the piracy rate, the larger the IT sector and the greater the benefits. Putting this into real numbers, the IDC survey concludes that a 10 point reduction in the global piracy rate between 2002 and 2006 could deliver 1.5 million new jobs, $64 billion in taxes and $400 billion in new economic growth. In North America alone, benefits would include 145,000 new jobs, $150 billion in additional economic growth and more than $24 billion in tax revenues.

Reducing piracy delivers indirect benefits as well. Society benefits from new technological innovations. Consumers benefit from more choices and greater competition. Internet users benefit from new ways of communication and expanded

creative content made available online. And national economies benefit from enhanced productivity leading to higher standards of living.

Piracy: Defining the Problem

In its simplest terms, "software piracy" generally refers to the reproduction or distribution of copyrighted software programs without the consent of the copyright holder. Piracy of software can take several forms:

- **Organizational end-user piracy**

The business software industry's worst piracy problem traditionally has involved its primary users – large and small corporate, government and other enterprises – that pirate our members' products by making additional copies of software for their own internal usage without authorization. We commonly refer to this activity as "organizational end-user piracy."

Organizational end-user piracy occurs in many different ways. In what is perhaps the most typical example, a corporate entity will purchase one licensed copy of software, but will install the program on multiple computers. Other forms of end-user piracy include copying disks for installation and distribution, in violation of license terms; taking advantage of upgrade offers without having a legal copy of the version to be upgraded; acquiring academic or other restricted or non-retail software without a license for commercial use; and swapping disks in or outside the workplace. Client-server overuse – when too many employees on a network have access to or are using a central copy of a program at the same time, whether over a local area network (LAN) or via the Internet – is another common form of end-user piracy.

Organizational end-user piracy goes on in enterprises large and small, public and private. While corporate end-user pirates do not generally make copies for resale or commercial distribution, they nonetheless receive an unfair commercial advantage because the money that they save on legitimate software licenses reduces their operating costs and increases the profitability of their enterprise. In many cases, the piracy is attributable to negligence and poor asset management practices. Enterprises can also be victimized by unscrupulous computer manufacturers and dealers who install copies of software onto the internal hard drive of the personal computers they sell without authorization from the copyright holder. In some cases, however, organizational end-user piracy is undertaken willfully, with management fully aware and supportive of the conduct.

- **Counterfeiting**

Counterfeit software continues to pose a serious problem for BSA's members. The most flagrant software counterfeiters produce CD-ROMs that look very similar to those of the software publisher. These counterfeit CD-ROMs often bear reproductions of the manufacturer's logo and other labeling, and are distributed with counterfeit packaging, manuals, security features and other documentation. Sophisticated counterfeiters often replicate these CD-ROMs at dedicated pirate facilities, using the same type of equipment and materials used by legitimate software manufacturers. A single CD-ROM replication facility can produce more than a million discs every day, at a per unit cost of less than two dollars. In other cases, counterfeit CD-ROMs have been

traced to "legitimate" replicating plants that have contracted directly with counterfeiters.

Over the past several years, BSA has seen a dramatic increase in the amount of high quality counterfeit software imported into the U.S. from overseas, especially from Asia. International counterfeiting rings have become even more sophisticated in their methods of producing "look alike" software and components. For example, raids in Hong Kong uncovered evidence of advanced research and development laboratories where counterfeiters reverse-engineered the security features of at least one member company's software media. These activities are often connected with serious criminal organizations, as investigations in Asia, Europe, and Latin America have revealed. Indeed, evidence suggests that proceeds of counterfeiting have been used to fund terrorist groups. Compared to other similarly lucrative crimes like narcotics trafficking or arms dealing, software piracy is easy to pursue and low-risk; chances of getting caught are slim and, if caught, penalties are often light.

Compilation CD-ROMs also pose a problem. These CDs typically contain a large selection of software programs published by different software companies. Compilation CDs are typically sold for very little money (relative to the value of the legitimate software) at swap meets, flea markets, mail order houses, and over Internet auction and software web sites. Compilation software can be replicated using a relatively inexpensive (less than $1000) CD recorder which, when connected to a personal computer, employs a laser to "burn" installed software programs onto a blank disc. Although compilation CDs do not exactly replicate the packaging and logos of genuine software, unsophisticated consumers are often led to believe that compilation CDs are legitimate promotional products.

- **Internet piracy**

The Internet is the future of global communication and commerce. It creates tremendous opportunities for faster, more efficient and more cost-effective distribution of information, products and services across the globe. As technology innovators, BSA's members are at the forefront of these developments. Software is not only sold and delivered over the Internet, but also comprises a key component of the Internet infrastructure and provides the basic tools used to offer virtually any good or service online.

Unfortunately, in addition to creating significant social and economic opportunities, the borderless and anonymous character of the Internet makes it an ideal forum to engage in criminal conduct. As we have seen, the emergence of the Internet has added a new dimension to software piracy by permitting electronic sales and transmission of illegal software on a global scale. Instead of pirated copies being sold one at a time, millions of pirated copies can be downloaded every day. Geography no longer matters. A pirate based in Washington, D.C. can sell to someone in Australia or Norway with ease. Internet users can readily employ a search engine to find both legitimate and illegitimate sellers of software and the resulting transaction can take place in the privacy of their home or office. The ability of Internet pirates to hide their identities or operate from remote jurisdictions often makes it difficult for right holders to find them and to hold them accountable.

Over the past two years, BSA's Internet investigators have witnessed the global spread and growth in the online piracy of software. Today, computer users can and do download infringing copies of BSA members' products from hundreds of thousands of

locations on the Internet – from websites in China to shared folders on peer-to-peer systems in France. Pirated software is available on auction sites in Brazil and is offered through spam email solicitations that originate in Russia. To cite but one figure, during the month of February, BSA's Internet crawler system identified 173,992 infringing software programs being offered in 149 different countries.

There are three primary forms of Internet piracy: (i) the transmission and downloading of digitized copies of pirated software, through web sites, IRC channels, newsgroups and peer-to-peer systems; (ii) the advertising and marketing of pirated software on auction and mail order sites and through e-mail spam, involving delivery on physical media through the mails or other traditional means; and (iii) the offering and transmission of codes or other technologies used to circumvent copy-protection security features. There are, of course, many variations on these general themes. All of these activities cause significant harm to our industry, as they do to other creative sectors.

Among these variants of Internet piracy, peer-to-peer piracy (P2P) has been the subject of significant public debate over the past two years. BSA takes P2P piracy very seriously. We are engaged in concerted action to address this threat. While BSA and its members deplore this activity, however, we believe it is essential to distinguish the illegal uses of the technology from the technology itself. There is no doubt that P2P technologies have been abused to spread illegal content including pirated software, pornography and personal information. At the same time, however, P2P technologies have also created exciting new opportunities for legitimate users. One of the earliest examples of P2P technology is the SETI@Home project, which uses over 4 million computers worldwide to search radio signals captured from space for signs of intelligent life. Stanford is using P2P technology to help find cures for diseases such as Alzheimer's, cystic fibrosis and BSE (mad cow disease). Software companies are also looking to P2P technologies to undertake routine tasks such as distributing updates for installed software including anti-virus and firewall software; in this way, software can be constantly updated in response to new Internet threats.

- **Industry Efforts against Piracy**

The Business Software Alliance and its individual members devote significant financial and human resources to preventing piracy worldwide. Our efforts are multi-faceted.

First, we are engaged in extensive educational efforts, designed to increase public understanding of the value of intellectual property and to improve overall awareness of copyright laws, on a global basis. For example, earlier this year BSA launched "Netrespect," a free educational resource to encourage responsible Internet behavior among young people. This initiative first rolled out in Ireland, responds to a growing need to promote cyber-education, beginning with encouraging teenagers to value creativity, respect intellectual property and practice responsible computer behavior. In addition to our broad-reach educational campaigns, BSA offers many tools to facilitate compliance. Among other resources, we provide guides and technologies that assist end-users in ensuring that their installed software is adequately licensed. We likewise offer tips to consumers so that they can be confident that the software they acquire on-line is legitimate.

Second, we work closely with national and international bodies to encourage adoption of laws that strengthen copyright protection and promote an environment in which the software industry can continue to innovate. BSA has provided input into the most important international agreements protecting intellectual property, including the

World Intellectual Property Organization's Copyright Treaty and the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs). We are active at the national level as well, both in the area of law reform and through the provision of training and other assistance to public authorities including police, prosecutors and judges. And we have worked directly with governments worldwide, including the U.S. Government, to adopt and implement software asset management programs in order to prevent software piracy in the public sector and to set an example for the private sector to follow.

Finally, where appropriate, BSA undertakes enforcement actions against those involved in the unlawful use, distribution or sale of its members' software. On the Internet, for example, BSA conducts a far-reaching "notice and takedown" program. Operating on the basis of referrals from members, complaints from consumers and infringing activity identified through our own proactive searches, BSA's team of Internet investigators identifies infringing sites and takes action to have these sites removed or disabled. Last year alone, BSA sent over 170,000 notices to Internet service providers. BSA's members have also filed suit against individuals offering pirated software for free download and over auction sites. BSA also engages in civil litigation against corporate end-users who are using our members' products without authorization. To this end, and consistent with the WTO TRIPs Agreement, we conduct civil "ex parte" (surprise) searches against corporate targets across the globe. We also work closely with local, national and international law enforcement bodies to protect the intellectual property rights of our members.

Technology plays a role in protecting intellectual property rights as well. Content owners must take responsibility to ensure that their works are not easily subject to theft, rather than rely wholly on others to protect their intellectual property. Accordingly, BSA's members have invested hundreds of millions of dollars and thousands of engineering hours in developing technologies to protect content and intellectual property. Our companies have worked diligently, voluntarily and cooperatively with content providers and consumer electronics companies to create systems that will foster the legitimate distribution of digital content. Experience clearly demonstrates, however, that there is no silver bullet technological solution that will solve the problem of piracy. Nor are government mandates the answer. Technology develops most effectively in response to market forces; government mandates would stifle innovation and retard progress.

The Role of Government

Of course, the government does have an essential role to play. Domestically, the investigation and prosecution of IPR-related offenses, using the legal tools provided by Congress, is a vital complement to our own enforcement efforts. We look to the government to continue to expand its IP law enforcement activities here at home. Internationally, the software industry looks to the U.S. government to persuade foreign governments to commit to protect and enforce intellectual property rights, and to ensure that these countries meet their commitments.

Domestic

Software piracy in the United States is a serious problem – make no mistake. Even though the piracy rate in the U.S. compares favorably with most other parts of the

world, it still represents a loss of nearly six and a half billion dollars annually for our industry.

Investigation and prosecution of copyright piracy is an essential part of the solution to this problem. BSA commends the Department of Justice for its increased emphasis on IPR and cybercrime enforcement. So far this year DOJ has carried out two major operations against Internet piracy: Operation Fastlink, which targeted warez sites in the 27 U.S. states and 10 foreign countries; and Operation Digital Gridlock, which targeted illegal P2P file sharing activities in Texas, New York and Wisconsin. Attorney General Ashcroft's announcement in March of a new Intellectual Property Task Force under the leadership of David Israelite, Deputy Chief of Staff and Counselor to the Attorney General, is another important affirmation of DOJ's commitment to fighting domestic and international piracy and counterfeiting.

As I have already mentioned, Internet piracy is one of the major areas of concern for BSA's members. Congress has wisely enacted legislation that criminalizes online distribution of pirated software and increases penalties for Internet piracy. To ensure that these laws have real impact, U.S. law enforcement agencies have elevated the priority given copyright offenses including Internet piracy, resulting in important prosecutions against criminal pirates and counterfeiters. Following on these measures, the number of Americans on the Internet has nearly doubled, from 70 million people to 137 million. The copyright industry has expanded at a rate of 10% each year. And last year, copyright industries contributed $535 billion dollars to the U.S. economy – more than 5% of the gross domestic product.

But, just as the Internet has evolved rapidly, so has Internet piracy. New methods of Internet piracy are constantly testing the limits of the legal tools that Congress has provided to right holders and prosecutors. BSA is eager to work with the Congress and the Justice Department to ensure that legal tools such as the NET Act keep up with the challenges of the rapidly-changing Internet environment.

Legal tools are one part of the equation, but they must be complemented by adequate investigation. We believe that expanded investigatory assistance by the FBI will support and enhance the efforts being made by U.S. Attorneys around the nation in prosecuting intellectual property offenses.

International

Intellectual property products, including computer software, have become a vital part of international trade. In 2001 the copyright industries generated more than $88 billion in foreign sales and exports. The nexus between IP and trade has also provided one of the principal levers for moving foreign governments into compliance with international norms for protection and enforcement of IP rights. The U.S. government has had great success in using a variety of tools at its disposal for achieving this goal – principally the negotiation of strong IP provisions in new trade agreements, enforcement of the TRIPs Agreement though WTO dispute settlement procedures, the Special 301 program, and administration of trade preference programs such as GSP.

These efforts have been led by a small but dedicated professional staff at USTR. USTR has been ably supported in this work by the State, Commerce and Justice Departments; and the USPTO and the Copyright Office have provided essential subject matter expertise. BSA commends the entire interagency team for their efforts to ensure foreign market access for goods and services with U.S. intellectual property and

compliance with international agreements protecting intellectual property rights. Their hard work is paying off – not only for the U.S., but for our foreign trading partners as well, since the ability of countries to reap high economic benefits from the software sector is highly dependent on their ability to promote protection and enforcement of intellectual property rights.

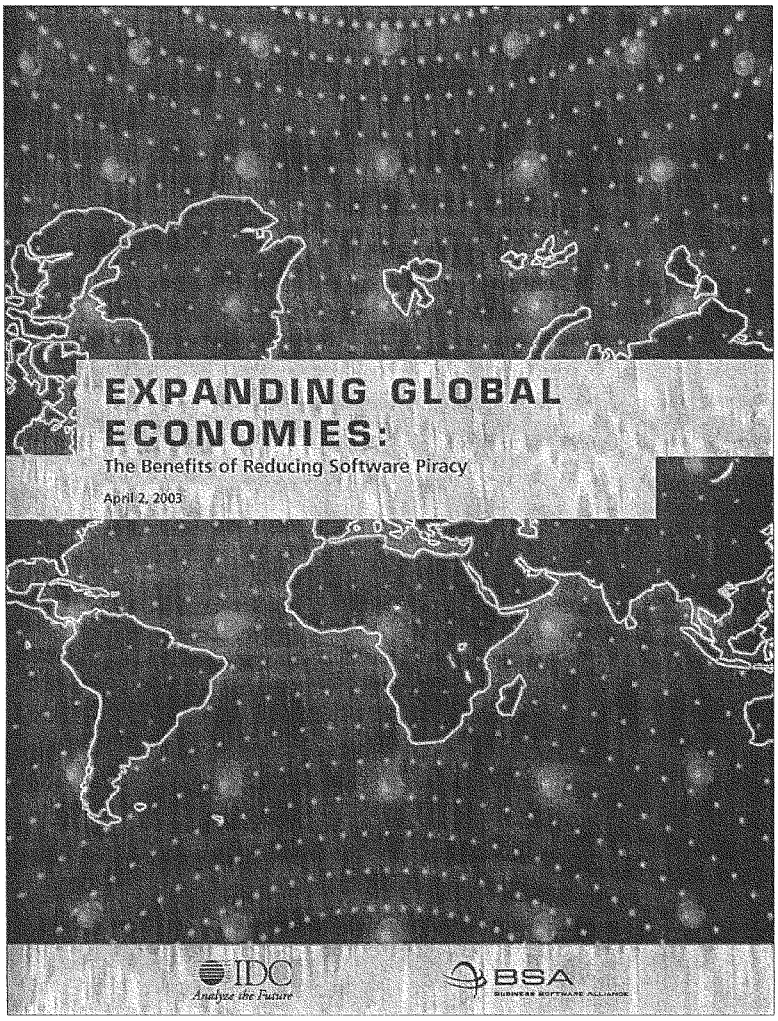
These efforts can and should be enhanced by providing USTR with additional resources for negotiating and enforcing strong norms and obligations for the protection of intellectual property rights. BSA would support the creation of a new and separate Intellectual Property Office within USTR, with increased staff, to enable USTR to continue to place a high priority on IPR negotiation and enforcement.

Similarly, BSA believes that an Intellectual Property Office should be created within the Department of State, under the Assistant Secretary for Economic and Business Affairs. This would assist the State Department in continuing to place a high priority on ensuring foreign market access for U.S. intellectual property products and services and compliance with international agreements protecting intellectual property rights.

Conclusion

Software contributes profoundly to the world in which we live. It allows us to share, to create and to innovate in ways previously unimaginable. Software-driven productivity strengthens national economies, including our own, and makes them more competitive and more prosperous. Unfortunately, piracy prevents the software industry from realizing its full potential. We urge the U.S. Government and other governments worldwide to help us solve this problem. We thank you for the efforts made to date.

Thank you again for the opportunity to testify here today. I look forward to your questions and to continued dialogue on this important topic in future.


EXPANDING GLOBAL ECONOMIES:
The Benefits of Reducing Software Piracy
April 2, 2003
IDC
Analyze the Future
BSA
BUSINESS SOFTWARE ALLIANCE

EXECUTIVE SUMMARY

Major Thesis: Information technology, driven by the software sector, is a proven engine for economic growth and prosperity. Reducing the rate of software piracy can help jumpstart the world's stagnant and struggling economies by creating new jobs and business opportunities that generate spending and new tax revenues.

THE ECONOMIC IMPACT OF THE IT SECTOR

This report represents the findings from an IDC analysis assessing the impact that IT has in 57 countries around the world and the economic benefits that accrue to countries that tighten and enforce their intellectual property laws. It finds that:

- **IT Growth Delivers Key Economic Benefits.** The IT sector already employs more than nine million people, raises more than $700 billion in taxes a year, and contributes nearly a trillion dollars a year to global economic prosperity. Between 1996 and 2002, the IT sector grew 26 percent, creating 2.6 million new jobs and contributing a cumulative $6 trillion to economies around the world.
- **Software is A Key Driver of IT Sector Growth.** The software sector alone grew six times faster than the hardware sector between 1996 and 2002. Now, software and related IT services account for 60 percent of IT sector spending.
- **The Lower The Piracy Rate, the Greater The IT Contributions.** Globally, one in four copies of software is pirated, with piracy rates in individual countries ranging from 25 percent to 94 percent. Countries with the lowest piracy rates enjoy larger IT sectors accompanied by greater tax bases, more jobs and other economic benefits. The lower the piracy rate, the larger the IT sector grows and the greater the benefits it delivers.

MAJOR FINDINGS OF THE ECONOMIC IMPACT OF PIRACY REDUCTIONS

Analysis of data compiled by IDC *reveals six key findings* about the economic impact a 10-point reduction in software piracy would have worldwide over four years:

1. **IT Growth Accelerates With Software Piracy Reductions.** The IT sector, projected to grow 34 percent between 2001 and 2006, could grow 15 points faster, or 49 percent, with a 10-point piracy reduction. In fact, nearly two-thirds of the countries studied would see greater than 50 percent IT sector growth. For example, with a 10-point piracy reduction:
   - *China* could see its IT sector grow nearly five times over four years.
   - *Russia* could double its IT sector and create more jobs than the number of people currently employed in its hardware, software and IT services sectors combined.
   - *Brazil* could achieve as much economic benefits as all other countries in Latin America combined.

2. **Faster IT Growth Delivers New Jobs, Taxes And Economic Expansion.**

A 10-Point Drop In Worldwide Piracy From 40% To 30% Over 4 Years Could Add:
- ✓ 1.5 million jobs
- ✓ $64 billion in tax revenues
- ✓ $400 billion in additional economic growth

3. **High Piracy Countries Could Achieve The Greatest Benefits From Piracy Reductions.** Eight of the countries with the Top 10 piracy rates would rank in the Top 10 by benefits achieved from a 10-point piracy reduction.

4. **Nations With Lower Piracy Have Proven Benefits.** Countries that have worked hard to reduce piracy, like Japan, Egypt, and the UK, have already realized significant economic benefits or are poised for rapid acceleration of their IT economies.

5. **Every Region Could Benefit From Piracy Reductions.** Regionally, Asia-Pacific, followed by Eastern and Western Europe, would see the greatest relative benefits from piracy reductions.

6. **A 10-Point Piracy Reduction Is Achievable.** Nearly two-thirds of the 57 countries surveyed have already reduced software piracy at least 10 points since 1996.

MAJOR IMPLICATIONS OF PIRACY REDUCTIONS

Reducing Piracy Delivers Benefits for Many -- Consumers, Entrepreneurs, Workers, Governments, And Economies. For instance, the IT sector contributed more than $700 billion in tax revenues in 2002 that helped fund public services like education and health care. Each single-point reduction in the piracy rate worldwide raises $6 billion additional tax dollars. A 10-point reduction could generate $64 billion in government revenues, which would be enough to provide:

- ✓ more than 30 million computers for schools
- ✓ health care for 32 million people
- ✓ college degrees for 6.9 million people
- ✓ Internet access for more than 20 million people for four years (including phone and ISP charges)
- ✓ primary education for roughly 4 million children

Governments Can Take Specific Steps To Unleash Greater IT-Driven Economic Benefits. Governments can take proactive steps through stronger legislation and public policies that combat piracy, help educate consumers, and, as a result, unleash broader economic benefits.

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INTRODUCTION

The information technology (IT) sector, driven by the software industry, is now one of the fastest-growing and most vibrant segments of the global economy. It is a proven engine for delivering economic growth and prosperity. The IT sector is transforming new innovations into economic opportunity – creating new jobs, new businesses, and additional tax revenues. Already, the IT sector employs millions of people, contributes billions of dollars in taxes, and adds trillions of dollars to global economic prosperity.

Now, new data from around the world combined with new economic models by IDC predict that the IT sector's rapid rate of growth will not only continue, but can accelerate. Strategic reductions in software piracy can be the tool that unleashes the IT sector's full economic potential. Faster IT sector growth can help jumpstart stalled economies, create new economic opportunities, and help economies become more productive.

This report represents the findings from an IDC analysis assessing the impact that IT has in 57 countries around the world and the economic benefits that accrue to countries that tighten and enforce their intellectual property laws. It finds that software piracy is a key differentiator between countries that are already enjoying vast IT sector benefits and those that have yet to unleash their full potential. Globally, one in four copies of software is pirated, with piracy rates in individual countries ranging from 25 percent to 94 percent. Reducing those rates 10 points could create 1.5 million new jobs, generate $64 billion in additional tax revenues, and foster $400 billion in additional economic growth.

This whitepaper is divided into three distinct sections. First, it analyzes the economic impact of the IT sector in 57 countries – its key benefits and drivers. Second, it analyzes data from a newly developed IDC Piracy Impact Model to explore the additional economic benefits that could come from future software piracy reductions. Third, it looks at the implications of these findings, and outlines what countries can do to fuel greater IT sector growth and benefits.

THE ECONOMIC IMPACT OF THE IT SECTOR

Three Key Findings On The IT Sector's Economic Impact:

- The IT sector is an engine for global economic growth
- The software sector is fueling broader IT sector growth
- The IT sector contributes more to economies when software piracy is lower

Analysis of the economic impact data compiled by IDC reveals the magnitude of effect that the IT sector is having on economies. The IT sector now employs more than nine million people, raises more than $700 billion in taxes a year, and contributes nearly a trillion dollars a year to global economic prosperity. IT sector growth directly benefits workers, governments, and economies throughout the world.

The IT Sector Is An Engine For Global Economic Growth Delivering Key Benefits.

- The IT sector now directly employs nine million people in high-wage, skilled jobs in more than 4,000 companies around the world. It also supports 21 million more IT professionals in a range of industries from consulting to trucking. The number of IT industry jobs grew by 40 percent between 1996 and 2002, while software jobs grew by 76 percent.

- The IT sector returns more than $700 billion a year in tax revenues to governments in every country. These tax revenues from IT-related activities, which grew 37 percent between 1996 and 2002, support vital public benefits and services – helping keep children in schools, the public secure, and transportation systems running. As IT sectors grow, governments benefit.

- The IT sector contributes nearly a trillion dollars a year to the global economy: including $330 billion from the hardware sector; $180 billion from the packaged software sector; and another $420 billion from the IT services sector.

Because the IT sector is faster growing than more traditional economic sectors, it is able to deliver more and greater benefits. As the IT sector grows, it generates new jobs, taxes, and economic growth. The faster it grows, the more economic benefits it creates. One of the primary drivers of faster IT sector growth is software.

Analysis Covers 57 Countries in 6 Regions Around the World

ASIA-PACIFIC	EASTERN EUROPE	LATIN AMERICA	MIDDLE EAST-AFRICA	WESTERN EUROPE
Australia	Bulgaria	Argentina	Israel	Austria
China	Croatia	Brazil	Egypt	Belgium
Hong Kong	Czech Republic	Chile	Kuwait	Denmark
India	Hungary	Colombia	Saudi Arabia	Finland
Indonesia	Poland	Costa Rica	South Africa	France
Japan	Romania	Mexico	Turkey	Germany
Korea	Russia	Peru		Greece
Malaysia	Slovakia	Puerto Rico		Rep. of Ireland
New Zealand	Slovenia	Venezuela		Italy
Philippines	Ukraine			Netherlands
Singapore				Norway
Taiwan			NORTH AMERICA	Portugal
Thailand			Canada	Spain
Vietnam			United States	Sweden
				Switzerland
				UK

The Software Sector Is Fueling Broader IT Growth

- The software and related IT services industries are the twin drivers behind IT sector growth – contributing more than hardware. In 2001, software and IT services accounted for more than 60 percent of IT sector spending (see figure 1). They are faster growing too. For example, spending on software grew six times faster than spending on hardware between 1996 and 2001 (see figure 2). The software industry's increasing growth rate, combined with its ability to add value to the services sector, have propelled it into a new position of prominence as a primary driver of IT growth and benefits.

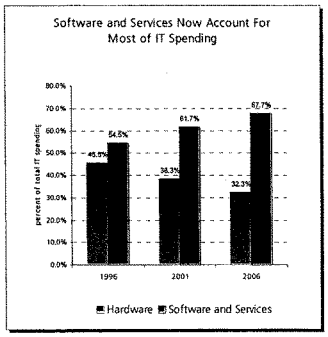


Figure 1 Source: IDC data

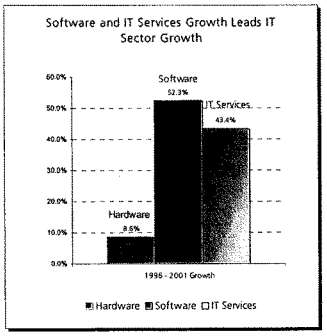


Figure 2 Source: IDC data

- When the software sector grows, it creates a ripple or multiplier effect that stimulates other parts of the IT sector and the economy. Software industry growth drives local outlet growth and local IT services expansion as companies grow to meet new demand for software customization. Similarly, software sector growth increases overall IT spending by all industries -- helping drive the economic effects into other parts of the economy. Not only does the software sector help create more good, high-wage, high-skill jobs, it also contributes more to government revenues and benefits virtually every other industrial sector by making them more productive.

The IT Sector Contributes More To Economies When Software Piracy Rates Are Lower

Not all countries' software and IT sectors are growing at the same rate. In assessing the differences between countries that are generating greater IT-related economic benefits and those that have yet to unleash its full economic potential, one key finding comes into focus: A country's software piracy rate is a key differentiator between countries that enjoy vast IT economic benefits and those that have yet to unleash them.

- **Piracy and the Size of a Country's IT sector.** The IT sector plays a greater role in promoting economic growth in countries that have lower piracy rates. In general, there is an inverse relationship between software piracy rates and the size of the IT sector as a share of GDP. The lower the piracy rate, the larger the IT sector grows and the more benefits it delivers. For example, countries with piracy rates under 30 percent like the United Kingdom, Finland, and New Zealand enjoy larger IT sectors that comprise more than 3.5 percent of their respective GDPs. Whereas countries with higher than 85 percent piracy rates have IT sectors that comprise less than 1.5 percent of their economies. The lower the piracy rate, the larger it's IT sector, and the more benefits it delivers.

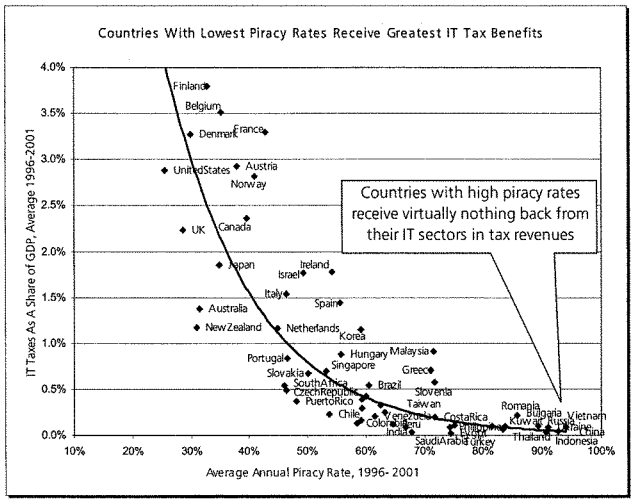


Figure 3 Source: IDC data

- **Piracy and The Size of A Country's IT-Related Economic Benefits.** The lower the piracy rate, the greater the IT-related benefits. Countries with low piracy rates generally enjoy more IT jobs, larger IT sectors and greater tax benefits. Countries with low piracy rates receive greater tax benefits as a share of their GDP than countries with high piracy rates (see figure 3). Of the countries studied, the 11 with the highest software piracy rates (75 percent or greater between 1996 and 2001) had IT tax benefits limited to .5 percent of their GDP or less. By comparison, the countries with the nine lowest piracy rates (35 percent or lower) received IT tax benefits that averaged 2.25 percent of their GDP. Countries with low piracy rates have larger IT sectors, which in turn generate a larger share of taxes for governments.

MAJOR FINDINGS ON THE ECONOMIC IMPACT OF PIRACY REDUCTIONS

IT sector growth, led by strong software demand and lower software piracy rates, is now having a profound and positive impact around the world -- on economies, entrepreneurs, workers, consumers, and governments alike. The finding begs an important new question: What can countries do to unleash further IT sector growth and maximize its benefits?

For the first time, data on the economic impact of technology in 57 countries has been combined into a newly developed IDC Piracy Impact Model to help answer this question. The results are profound. This new economic impact model not only predicts that the IT sector's rapid rate of growth will continue, but that it can accelerate. It provides new insights into the direct economic impact of lowering software piracy and the future benefits it can deliver. Most importantly, it provides countries with a positive pathway for harnessing the software and overall IT sectors' full potential for providing economic benefits to its citizens.

This new data reveals that the economic impact of even a slight reduction in the amount of pirated software can be significant – helping to accelerate IT sector growth. It demonstrates how even a modest and achievable 10-point reduction in software piracy rates can be a powerful tool for delivering jobs, tax revenues and economic opportunity. In fact, countries with the highest piracy rates would enjoy the greatest relative benefits from piracy reductions.

SIX KEY FINDINGS

Analysis of the data compiled by IDC *reveals six key findings* about the economic impact of a 10-point drop in the worldwide software piracy rate from 40 percent to 30 percent, or 2.5 points a year from 2002 through 2006:

Six Key Findings On The Economic Impact Of A 10-Point Reduction In Software Piracy

1. IT sector growth accelerates with piracy reductions
2. Faster IT growth could deliver 1.5 million new jobs, 100 billion in taxes, and $400 billion in new economic growth
3. Countries with higher piracy rates obtain larger benefits from piracy reductions
4. It's a proven approach: nations that have already reduced piracy are showing results
5. Every region, every country, could benefit from further piracy reductions
6. A 10-point reduction is achievable – nearly two-thirds of countries have already done it since

1. **IT Growth Accelerates With Software Piracy Reductions**
The IT sector's rapid rate of growth will not only continue, but can accelerate. Between 2001 and 2006, the IT sector is projected to grow five points faster than it did between 1996 and 2001 –from 29 percent to 34 percent. However, the sector could grow a full 15 percentage points faster, or 49 percent, with the help of a 10 percentage point reduction in piracy (see Figure 4). The greater the piracy reduction, the greater the IT sector growth achieved.

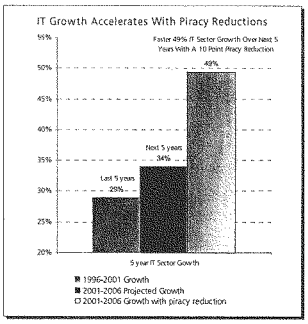


Figure 4

Nearly Two-Thirds of Countries Would See Greater Than 50 Percent Combined IT Sector Growth. These benefits would not be limited to any country, region, or hemisphere. Every country would grow its IT sector faster. IDC data indicates that countries could generate an average 20 points of additional growth between 2002 and 2006 with a 10-point reduction in piracy. Individually, those rates could range from four points for Puerto Rico to 259 points for China. Russia, already projected to grow by 69 percent, could grow roughly 50 points faster, to 118 percent between 2002 and 2006. The number of countries that could achieve greater than 50 percent combined IT sector growth between 2002 and 2006 would jump from 25 (less than half), to 37 (nearly two-thirds) with a 10-point reduction in software

piracy. High piracy countries like Vietnam, Indonesia, and Russia could see their IT sectors rank among the Top 10 for fastest growth with the help of a 10-point piracy reduction (see Table 1).

Top 15 Fastest Growing IT Sectors
With 10 Point Piracy Reductions
2002-2006 Growth Rate

	Growth With Piracy Reduction	Growth Without Reduction	Growth Differential
China	376%	117%	259%
Argentina	282%	250%	33%
Turkey	165%	146%	19%
India	163%	148%	15%
Vietnam	146%	76%	69%
Indonesia	145%	69%	75%
Russia	118%	69%	49%
Philippines	118%	106%	12%
Malaysia	92%	70%	22%
Korea	91%	81%	10%
Thailand	87%	69%	19%
Ukraine	85%	46%	39%
Bulgaria	84%	55%	29%
Singapore	80%	68%	12%
Romania	76%	51%	25%

Table 1

2. Faster IT Growth Delivers New Jobs, Taxes and Economic Growth

Faster IT growth means larger IT benefits. According to the IDC analysis, a 10-point drop in the worldwide piracy rate from 40 percent to 30 percent (2.5 point decrease a year from 2002 – 2006) would create an additional 1.5 million jobs, generate an additional $64 billion in tax revenues, and contribute another $400 billion to economic growth. Even larger reductions would generate still greater growth and cumulative benefits (see Table 2). For instance, a more aggressive 20 percentage point reduction would yield more than a trillion dollars in additional economic growth and 2.25 million new jobs around the world. A more modest 5 percentage point reduction could still create substantial benefits for an economy – adding nearly $350 billion in revenues and creating almost a million more jobs. Every one point drop in the piracy rate generates roughly $40 billion in economic benefits.

A 10-Point Drop In Piracy From 40% To 30% Over 4 Years Would Add:

- 1.5 million jobs
- $64 billion in tax revenues
- $400 billion in additional economic growth

Larger Piracy Reductions Bring Greater Benefits	5-Point Reduction			10-Point Reduction			20-Point Reduction		
Region	Contribution to GDP ($M)	New Jobs	Additional Taxes ($M)	Contribution to GDP ($M)	New Jobs	Additional Taxes ($M)	Contribution to GDP ($M)	New Jobs	Additional Taxes ($M)
Asia-Pacific	$ 138,920	733,155	$ 12,354	$ 169,088	1,100,430	$ 15,130	$ 313,791	1,487,264	$ 29,363
North America	$ 118,580	77,909	$ 18,942	$ 150,922	146,792	$ 24,444	$ 400,768	263,102	$ 64,012
Western Europe	$ 71,947	108,094	$ 17,729	$ 91,289	202,709	$ 22,472	$ 239,945	360,505	$ 59,132
Eastern Europe	$ 9,169	29,191	$ 647	$ 11,192	49,279	$ 799	$ 24,169	75,806	$ 1,831
Latin America	$ 5,104	13,719	$ 490	$ 6,414	25,392	$ 614	$ 16,456	44,196	$ 1,580
Middle East-Africa	$ 3,695	6,042	$ 326	$ 4,714	11,192	$ 412	$ 11,914	19,528	$ 1,073
Worldwide	$ 347,415	968,110	$ 50,488	$ 433,619	1,535,793	$ 63,872	$ 1,007,043	2,250,402	$ 156,992

Table 2 Cumulative benefits from piracy reductions, 2002 to 2006. GDP contribution does not include imports or exports.

3. Economies With Higher Piracy Rates Would Obtain Larger Benefits

Nations with the highest piracy rates today stand to *gain the most* from reducing software piracy. Country benefits can be compared by their relative benefits -- derived by comparing the total additional GDP contribution from a 10-point piracy reduction to the projected sector size in 2006 without piracy reductions. Countries with the highest piracy rates like Indonesia, Vietnam, China, and Russia would gain some of the greatest relative benefits from piracy reductions (see Figure 5). The further their rates were reduced, the more those nations would benefit.

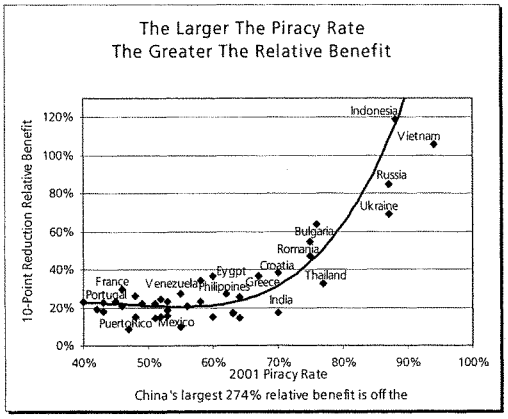


Figure 5 Source: IDC data. Data for countries with piracy rates above 40% shown

Eight of the 10 countries that would gain the most from a 10-point piracy reduction are also ranked among the Top 10 countries with the highest piracy rates (see Table 3). These high piracy countries would gain the most jobs, tax benefits, and economic growth from software piracy reductions.

Top 10 Beneficiaries		
	Piracy Rank	Piracy Rate
China	2	92%
Indonesia	3	88%
Vietnam	1	94%
Russia	4	87%
Ukraine	5	87%
Kuwait	7	76%
Bulgaria	8	75%
Romania	9	75%
Malaysia	11	70%
Croatia	12	67%
Thailand	6	77%

Table 3 Ranked in order of country with largest relative global benefit, compared to global piracy ranking, and 2001 piracy rate

Individual Countries Could Achieve Dramatic Benefits From A 10-Point Reduction in Piracy

- ***China*** could see its IT sector grow nearly five times in four years. China could also create nearly a million new high-tech, high-wage jobs – double the number of people currently employed by its entire IT sector. China, which has the most to gain, could see benefits twice that of every other country in the Asia-Pacific region combined.
- ***Russia*** could double its IT sector and create nearly 30,000 new high-wage, high-tech jobs – more than the number of people currently employed by its hardware, software and IT services sectors combined.
- ***Brazil*** could add another $3.2 billion to its economy, as much as every other Latin American country combined.

4. Nations That Have Already Reduced Piracy Are Showing Results

Nations that have already worked hard to substantially reduce software piracy have either realized significant economic benefits or are poised for rapid acceleration in the growth of their IT sectors. A few countries stand out:

- ***Egypt*** reduced its piracy rate 30 points between 1996 and 2002. That helped its software sector grow 160 percent, which gave it the fastest software and IT sector growth in the Middle East. In fact, Egypt's accelerated software growth rate helped its IT sector double in size. A further 10-point piracy reduction could help Egypt grow its IT sector more than 50 percent in just four years.

- *Kuwait* lowered its piracy rate 13 points since 1996, which helped it triple its software sector and double its IT sector.

- *Japan,* with the third lowest piracy rate in the Asia-Pacific region (37 percent), has already grown its IT sector into a $100 billion industry. It could grow to $150 billion with further piracy reductions.

- *The United Kingdom,* with Western Europe's lowest software piracy rate (25 percent), also has Europe's fastest growing software industry. Software grew 55 percent between 1996 and 2002, helping the IT sector add a half million jobs in six years.

- *Hungary* reduced its piracy rate an impressive 21 points (to 48 percent) since 1996, which helped the country's software sector become the largest as a percentage of its IT sector in the region. In turn, local IT revenues grew by 27 percent a year on average, adding $729 million in revenues to the economy, and creating 9,000 new jobs between 1995 and 2001.

Largest Relative Value of Benefit	
Asia-Pacific	44.4%
Eastern Europe	13.9%
Western Europe	8.1%
Middle East-Africa	6.9%
North America	5.2%
Latin America	4.8%

Table 4 Regional ranking of relative benefits from 10-point piracy reduction

5. Every Region Would Benefit From Piracy Reductions

Almost every country and every region is feeling the impact of the global economic downturn. In some cases these macro economic factors have combined to help stall broader IT sector growth in recent years. It has also dampened benefits from past piracy reductions and might do so again in the future. Nonetheless, every region of the world would gain substantial new economic benefits from reducing software piracy. In many cases, piracy reductions could help jumpstart stagnant and struggling economies.

The IDC data reveals that regions with higher piracy rates tend to enjoy greater relative benefits from piracy reduction. For example, the Asia-Pacific region, followed by Eastern and Western Europe, would derive the greatest relative benefits from piracy reduction (see Table 4). At the same time, in terms of direct dollar contribution to their GDPs, regions with larger IT sectors tend to gain the larger absolute economic benefit from software piracy reductions (see figure 6).

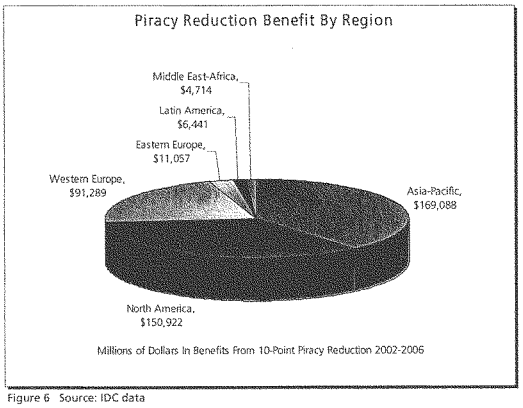


Figure 6 Source: IDC data

Asia-Pacific. The Asia-Pacific countries would benefit more than any other region in absolute terms from a 10-point piracy reduction. A 10-point drop would help it double its IT sector in size. It would also directly contribute an additional $170 billion to its economies, create 1.1 million new jobs, increase local industry revenues by nearly $120 billion, and generate another $15 billion in taxes to pay for needed government benefits and services. The Asia-Pacific IT sector helped create more than a million jobs over the last six years. Its IT sector could create another 2.8 million IT jobs in just four years with the help of a 10-point software piracy reduction.

Eastern Europe. Eastern Europe would gain the second largest relative benefits of all regions from software piracy reductions. Eastern Europe's IT sector now contributes more than $14 billion a year to its economies, employs 350,000 workers, and delivers more than $3 billion a year in tax revenues. By lowering its piracy rate from 67 percent to 57 percent by 2006, Eastern Europe could add another $11.2 billion to its economy, create nearly 50,000 good new high-wage, high-tech jobs, increase local industry revenues by almost $7 billion, and add another $800 million in government tax revenues. Six of the 11 countries that would be the biggest winners under the IDC piracy reduction impact model are in Eastern Europe.

Western Europe. Western Europe has both the world's second lowest software piracy rate and the second largest IT sector. Since 1996, with the help of a six-point piracy reduction, the region's IT sector has cumulatively added more than a trillion dollars to

Western Europe's economies and half a million jobs. With the software sector projected to lead overall growth in the IT sector, a further 10-point reduction in software piracy could help Western Europe double the number of people employed in IT jobs since 1995 – reaching 3.5 million IT jobs by 2006.

Middle East-Africa. The Middle East and Africa region's emerging $11.8 billion IT sector already employs more than 160,000 people and generates $3.8 billion a year in tax revenues. Reducing its software piracy rate by 10 points would help transform the region's IT industry into a $20 billion sector in just four years. Between 1996 and 2001, the region reduced software piracy 28 points -- the largest reduction of any region in the global survey. This region is projected to see the second fastest IT sector growth of 55 percent between 2001 and 2006. It could grow 12 percentage points faster – or 67 percent – if the region reduced its software piracy rate by 10 points.

North America. North America's $430 billion IT sector – the largest in the world – already employs 2.8 million people and generates $360 billion a year in taxes. North America now has the lowest software piracy rate, the largest software sector and the largest IT sector in the world. With a 10-point piracy reduction, North America's IT sector could grow 11 points faster, or 39 percent, between 2002 and 2006. Faster IT growth could help transform the North American IT industry into a $600 billion sector that employs more than 3.5 million workers. With an already low piracy rate, the large size of its IT sector helps provide North America with the second largest absolute benefit from piracy reductions – a $150 billion contribution to GDP.

Latin America. Latin America reduced its regional piracy rate 12 points between 1996 and 2001, helping its software industry grow 80 percent during the same period. The fast software growth helped Latin America's IT sector expand into a $24 billion sector that employs more than half a million people. With further software piracy reductions, Latin America could accelerate its projected 48 percent IT growth to nearly 57 percent. That would translate into an additional $6.4 billion for its economy, 25,000 new jobs for its workers, $5 billion in additional local revenues, and another $600 million in new tax revenues to help its governments fund public services and benefits.

6. A 10 Percentage Point Reduction Is Achievable

Most countries have already shown that a 10-point software piracy reduction is possible. Thirty-seven of the 57 countries surveyed, or nearly two-thirds, have reduced their piracy rates 10 points or more since 1996. Eleven countries cut piracy by 20 points or more, including Egypt, Slovenia, Turkey, The Philippines, Saudi Arabia, Ireland, and Israel, which cut their piracy rates 25 points or more.

For some countries, reducing software piracy 20 points is just as feasible as a 10-point reduction is for others. In Eastern Europe alone, a 20-point piracy reduction would add nearly $25 billion to economies, create 76,000 new jobs, and generate $1.8 billion in additional tax revenues.

Who Wins -- How And Why

Reducing Piracy Delivers Benefits In Many Ways
Reducing piracy helps unleash the creative potential of a workforce, the innovative potential of entrepreneurs, value potential for consumers, and growth potential for an economy. Greater intellectual property protections help deliver these benefits in a variety of ways:

- ✓ **Entrepreneurs Benefit From New Opportunities For New Innovations**
  Lower piracy creates more opportunities for legitimate entrepreneurs to compete and offer greater benefits to consumers. Local entrepreneurs and software engineers will not invest time or talent in businesses that cannot produce a profit. By protecting intellectual property, innovators can be assured that their hard work can be rewarded in software and service sales. As a result, innovative software entrepreneurs can create pioneering new enterprises -- employing more people and generating more tax revenue. Between 1996 and 2001, the IT sector created more than 250,000 local IT companies around the world. Further piracy reductions would create even more new local companies that in turn would hire new workers, order new services, and deliver more economic benefits.

  In fact, local industries benefit more than foreign software producers from piracy reductions. While foreign software makers do produce much of the software consumed in many countries, they can spread their piracy risk across multiple markets. Even though local software firms benefit directly from piracy reductions, substantial benefits also go directly to local service and channel firms from increased demand and sales. For example, IDC estimates that every dollar of packaged software sales generates an additional $1 in local service revenues and $1 to $2 in local channel revenues. Taken together, a 10-point reduction in the worldwide piracy rate would generate an additional $350 billion in local revenues over 4 years.

- ✓ **Workers Benefit From More Jobs That Pay Higher Wages**
  Piracy reductions create jobs. As a software industry grows, it helps grow the IT sector and create even more jobs. High-tech jobs are also better-paying, on average, than other private sector jobs. A 10-point reduction in piracy would help create another 1.5 million high-paying jobs around the world. By 2006, the IT sector could grow to employ more than 14 million people around the globe.

- ✓ **Consumers Benefit From More Choices And More Competition**
  With pirated software, consumers risk using defective, counterfeit products that lack important benefits like customer support and upgrade capabilities that can be vital to security. Reducing software piracy spurs greater competition among suppliers and results in even better and faster improvements in products.

- ✓ **Governments Benefit From New Revenues For Needed Services**
  Every single-point reduction in the piracy rate worldwide raises $6 billion in additional tax dollars. Tax revenues from a healthy IT industry are a vital part of the resources available to nations to spend on their public needs. For example, the IT sector returned

more than $4.5 trillion in cumulative tax revenues to governments in every country between 1996 and 2002. These tax revenues from IT-related activities, which grew 37 percent between 1996 and 2002, support important public benefits and services.

A 10-point piracy reduction would create $64 billion over four years in additional tax benefits for governments which, based on Organization for Economic Cooperation and Development (OECD) cost estimates, would be enough to provide:

- more than 30 million computers for schools
- health care for 32 million people
- college degrees for 6.9 million people
- Internet access for more than 20 million people for four years (including phone and ISP charges)
- primary education for roughly 4 million children

✓ **Economies Benefit From Greater Productivity Leading To Higher Standards Of Living**
Information technology improves economies in general. Businesses, governments, and workers invest in IT because it makes them more productive. IT and software now permeate almost every aspect of every sector in every economy. It has changed the way we work, the way we live, and the way we learn – making us more productive at every turn. By enabling businesses and governments to be more efficient and agile, and by allowing people around the world to communicate seamlessly across a range of devices, information technology is helping us all realize our true potential. The more pervasive IT has become in business, the more efficient business has become, improving productivity and profits. Productivity increases lead to even greater economic growth and development – raising standards of living along the way.

What Governments Can Do To Take Advantage Of These Benefits
Fundamentally, the intellectual power of a workforce and the innovative ideas it produces drive IT sector growth. Without protecting those ideas, IT sectors cannot achieve their full economic potential and produce their full economic benefits. Thus, in order to unlock the vast new jobs, taxes and economic benefits that faster growing IT sectors can create, governments need to take comprehensive and concrete steps to protect intellectual property and reduce software piracy rates. Experience shows that legal protection of software combined with strong enforcement and increased public awareness are the cornerstones for reducing software piracy. While emerging technological advances will play a role, the key to software piracy reductions stems from proactive government-led efforts.

Specific Steps For Reducing Piracy

Leading By Example. Combating software piracy often requires a fundamental culture shift in the way people view pirated software. Since governments are among the largest purchasers of software around the world, many governments have taken concrete steps to send the message that the government itself won't tolerate piracy. These countries have launched new efforts to manage their software resources, conduct internal audits and ensure that they are using only authorized software. Countries like

China, Spain, Taiwan, Ireland, Colombia, Jordan, Thailand, the Czech Republic, and Paraguay, among other nations, have issued software management policies. By sending a strong and clear message that the government itself won't tolerate piracy, these policies serve as a catalyst for greater software protection in both the public and private sectors. Leading by example is a crucial element for making the fundamental culture shift that can lead to declines in software piracy.

Education and Awareness. For the public at large, education is crucial for promoting respect for intellectual property. To reduce piracy, governments can increase public awareness of copyright laws, encourage legal use of legitimate software and explain the consequences of software piracy. They can appeal to business owners to adopt proper corporate internal guidelines for using legal software and remind them of the legal liabilities and potentially high cost of illegal software use. Many countries already have successful public education campaigns underway. Taiwan's premier, as an example, declared 2002 as "Action Year for IPR Protection" and sent letters to all businesses suggesting a course of action for protecting against illegal use of software and reminding them of the consequences for inaction. Governments and industry should work together to launch comprehensive educational campaigns to reduce piracy.

Combating Digital and Internet Piracy. The Internet has made it possible to distribute unlimited, flawless, illegal copies of creative works around the world in a matter of seconds. This online theft, like more traditional forms of digital piracy, undermines a creator's incentive to innovate. To reduce piracy, governments face a two-tiered challenge. First, governments need to adopt stronger laws specifically tailored to address digital and online piracy. Second, those laws must have workable mechanisms that can be vigorously enforced. The World Intellectual Property Organization (WIPO) has adopted digital copyright treaties to create international legal standards that governments can use to reduce digital and online piracy. The World Trade Organization's (WTO) agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) puts the teeth behind these WIPO treaties. In order to reduce piracy, governments around the world need to meet their enforcement obligations under the TRIPS agreement. In addition, countries need to adopt new legal measures that make it possible to battle digital piracy, shutdown websites that that offer pirated software, and specifically prohibit the production of or trafficking in tools that circumvent technological protection measures for copyrighted works.

Reducing Optical Piracy. Pirate CDs and DVDs represent a major area where governments can take actions to reduce piracy by putting comprehensive optical disc regulatory controls into place. Traditional enforcement mechanisms have not been sufficient to prevent optical disc piracy from spinning out of control and flooding national, regional, and global markets with millions of high-quality pirated products. As part of each country's WTO TRIPS obligation to provide deterrent enforcement against piracy on a commercial scale, every country whose optical disc production facilities are producing significant pirate product must consider creating and enforcing a specialized regulatory framework for tracking the growth of optical disc production capacity, including the cross-border traffic in production equipment and raw materials. This regulatory regime should include strict licensing controls on the operation of optical disc mastering and replication facilities, such as a requirement to use identification tools that

flag the plant in which production occurred and that help lead the authorities to the infringer. So far such regimes have been established in China, Bulgaria, Hong Kong, Malaysia, Taiwan and Macau, and are under consideration in Thailand, Indonesia and the Philippines.

Fighting Piracy By Organized Crime. Because of the immense profits that can be garnered by producing pirated optical discs, this illegal business has been taken over in many countries by organized crime syndicates, making it even more difficult for local authorities to combat the problem. Countries are stepping up with specific actions to combat these rings. Some countries that have recently raided software piracy rings include Australia, Hong Kong, Taiwan, and Mexico. Governments can fight organized piracy crimes by 1) increasing the priority of criminal intellectual property investigations and prosecutions, 2) making it easier for industry to provide referrals, 3) providing specialized training for investigators and prosecutors for high-tech crimes, and 4) providing further assistance to foreign law enforcement officials in order to get at the borderless nature of these crimes.

Conclusion

The software and IT sectors are dynamic engines for economic growth around the world. IDC's new Piracy Impact Model predicts that the IT sector's rapid rate of growth will not only continue, but can accelerate, by reducing software piracy rates. It provides new insights into the direct economic benefits of intellectual property protections. It shows that a country's software piracy rate is a key differentiator between countries that enjoy vast IT economic benefits and those that have yet to unleash them. And it outlines key benchmarks for what countries can achieve with specific piracy reduction goals.

Even a modest and achievable 10-point reduction in software piracy can help accelerate IT sector growth and deliver more than 1.5 million new jobs, another $64 billion in tax revenues, and an additional $400 billion to economies around the world. Software piracy reduction can be a powerful tool for jumpstarting economic growth – creating new jobs, taxes and business opportunities. In fact, countries with the highest piracy rates today can unleash the greatest economic benefits tomorrow.

Harnessing these benefits requires critical decisions today. If a country is to achieve the full economic potential of its IT sector and the vast benefits that accompany it, then software piracy reductions can be a strategic tool for achieving that goal. When piracy is reduced consumers, local entrepreneurs, workers, governments, and economies win.

APPENDECIES

- ✓ Methodology
- ✓ IDC Economic Data

IDC PROJECT SUMMARY AND METHODOLOGY

Background

In early 2002 IDC completed "The National Economies Study," which assessed the impact information technology (IT) has had on 28 countries since 1995. This impact was felt in job creation, company formation, increased IT spending, and tax revenues. In the course of this project we developed an Economic Impact Model (EIM), which ties local IT spending to the impact metrics. The model output – jobs, tax revenues, etc. – was validated with local government sources, and through this process the model was calibrated.

In mid-2002 IDC began a second study, which measured the impact of software piracy. Based on *The National Economies Study* and on the piracy rates published by the Business Software Alliance (BSA), IDC examined the impact that software piracy has had on individual countries.

During the fall of 2002 we extended our Economic Impact Model to encompass 57 countries and validated the remaining 30 countries with local officials. We also developed a Piracy Impact Model (PIM) that calculates the impact of piracy on IT-related employment, contribution to GDP, local vendor revenues, and tax revenues.

The primary output of the Piracy Impact Model is the impact on a local economy – employment, tax revenues, etc. – of having a lower BSA piracy rate. The objective is to create a credible measure of the *benefits* that accrue to a country that tightens and enforces its intellectual property laws and educates its citizens on the benefits of doing so.

Economic Impact Methodology

a. IT Spending – Spending by consumers, businesses, governments, or educational institutions on information technology, including hardware, software, services, and data networking, as measured in the IDC Worldwide IT Spending Trends reports (The "Black Book"). This spending *excludes* all telecommunications revenues, and some smaller emerging technology areas such as PDAs and videogames (although PC gaming software *is* included).

b. Tax Revenues – Potential VAT or sales tax revenues from the sale of IT hardware, software, or services and business and personal income and social taxes.

The basic approach was to first take total income, profit, and social taxes within a country and determine what proportion was attributable to IT activities. The country totals for taxes and employment were gathered from the OECD or other published statistics. The total IT employment or sales were taken from the IDC Economic Impact Model. Adjustments were made then based on assumptions that IT employees have a higher income than the average employee in a country. IT-related VAT taxes were calculated by analyzing the total IT spending in a country and determining what portion would be subject to rebate, since VAT taxes are collected only on final outputs. Since most IT spending is by business, not much VAT is paid on IT. The non-rebated portion was derived from our data on IT spending by vertical.

IDC then went through a review of the data using a number of sanity-checking tools. These included independent estimates of local IT salaries, with input from local analysts as well as IDC's and IDG's (our parent company) HR and tax departments. (IDG operates in over 65 countries). These gave us additional sources on salary levels, income tax rates, and corporate income tax rates for various countries. We looked then at the average percent of salary paid in taxes, relative tax percentages (country to country), salary per capita compared to GDP per capita, etc. In this way the tax revenue model was calibrated for the final input to the EIM and the PIM.

c. IT Employment – The number of people employed (full-time-equivalent) in hardware, software, services, or channel firms and those managing IT resources in an IT-using organization (e.g., programmers, help desk, IT managers). The definition *excludes* employment in occupations in IT-related industries, such as web graphics design, venture capital, trade magazine publishing, etc., and *excludes* individuals in business or government whose roles might be called "eBusiness management," such as marketing VP of online banking, manager of interactive media, etc.

Headcounts by category were first modeled based on estimated IT revenue per employee for hardware, software, or services companies based on standard ratios, and by levels of spending per employee by technology type for channels employees and IT professionals.

IDC had excellent inputs for modeled employment figures, including published IT headcount figures in Europe, a model created in Asia-Pacific, and IDC published data in the US from the late 1990s. In some cases the information was created from the ground up – by local analysts counting companies and researching the number of employees in those companies.

The data was cross checked with published information or census data available from government sources and sent to knowledgeable local government officials for validation. As a result of this process, the EIM was re-calibrated to yield the best final estimate of employment. This re-calibration included extensive cross-country comparisons – so the most trusted data could be used to hone the model for companies where in-country information was scarce.

d. Contribution to GDP – End-user spending or business investment in hardware, software, or services – essentially IT spending from all sources, as measured in the Black Book. Although GDP is a measure of government and consumer spending plus business investment plus exports minus imports, for the purposes of this project we did not account for exports or imports. Thus, the term "contribution" does not mean a direct dollar input to GDP.

e. Local Vendor Revenues – Revenues to vendors that are indigenous or headquartered in the country.

In creation of the EIM, IDC developed an estimate of the percent of IT spending accruing to local vendors. This was based on our understanding of the local market from in-country-research and published reports. It was also checked with government statistics on imports and exports of hardware and software, and with the IDC local analysts during calibration and sanity-checking of the EIM. In most countries, hardware systems were imported (although local

suppliers might provide components), software was imported, but a high percentage of services and channels were local.

Piracy Impact Methodology

a. Piracy – The unauthorized copying, reproduction, usage, or manufacturing of packaged software. In the BSA study, it is referred to as "software installed without a license."

This unauthorized use can run the gamut from unauthorized copying or downloading of software or purchasing software copied illegally, to corporate overuse (more clients than paid for) of licensed software.

b. Piracy Rate – The percentage of software installed in a country without a license, as measured by the BSA in its "Seventh Annual BSA Global Software Piracy Study" (available at www.bsa.org).

c. Percent Lower BSA rate – A theoretical future piracy rate by taking the current BSA rate and lowering it by X percentage points (not by X percent). Thus if a BSA rate is 50 percent, lowering it by 10 percentage points to 40 percent, *not* by 5 percent (10 percent of 50 percent).

d. Piracy Losses – The theoretical losses from piracy in terms of revenue to software vendors, software-related revenues to services firms, and software-related revenues of channel players. Employment losses are calculated from revenue losses, and only apply to employment in the IT industry, not IT professionals in end-user organizations (although we believe there is some impact there.) Tax revenue losses are calculated from revenue losses (VAT and corporate income tax) and employment losses (income and social taxes). The software losses are based on the BSA piracy rate and equal the value of software installed and not paid for, adjusted by IDC's software analysts to account for software in a country not measured in the BSA study. These "losses" compare the current metric to what it would be if there were zero piracy.

e. Piracy Benefit – The difference in "losses" from different piracy rates, with the lesser loss subtracted from the larger loss.

f. Piracy Effects – The method by which the study calculates the impact of piracy on an industry. The study calculated different effects from piracy on software, services, channel spending, employment, and tax revenues. In the case of software, we used a linear relationship between a lowering piracy rate and growing software spending. (E.g., if a country has a 50 percent piracy rate and $100 million software spending, lowering the rate to 0 percent would create a theoretical $200 million in software spending.)

While not every piece of formerly pirated software will be purchased if piracy rates go down – some will be substituted, some not used – at the same time lower piracy rates yield more economic activity that stimulates more software production and purchase. The two countervailing forces seem to cancel each other out. *This is the conventional assumption for most previously published piracy studies.*

IDC confirmed this, however, by analyzing the ratio of software spending to hardware spending for each of the countries in the study, and found that, in general, countries with higher piracy

rates had a lower software-to-hardware ratio. Often, adding calculated software "losses" to the current software spending *still* led to a software-to-hardware ratio lower than countries with low piracy rates.

(In countries where extremely high piracy rates occur, this linear relationship didn't always work as the substitute piracy rate approaches zero – i.e., there is some upper bound to how much software spending can increase in a country with a very small industry. We did not have to calculate this upper bound, however, because we use these "losses" at zero piracy only to calculate the differences from one piracy rate to another.)

For software-related *services* losses, we assumed that services firms could still obtain some service revenues on pirated software, and thus applied the loss calculation only to a portion of software-related services revenues. The vulnerable portion of software-related revenue ranged from 15 percent in countries with high piracy rates, to 67 percent in countries with very low piracy rates.

For software-related *channels* losses, we applied the same logic but with an even smaller percentage of software-related revenue at risk from piracy – generally about half the services percentage.

FAQs

Q. What is the strength of our methodology?

A. First, it is based on what IDC knows well – IT spending and IT markets. Second, it is the same for each country, none of which define the industry the same way in their own statistics. The ability to compare countries enhances our confidence in accuracy. Third, we have been meticulous in our definitions and descriptions of methodology, i.e. it is transparent

Q. What don't we cover?

A. We don't look at the productivity impacts from the use of IT or software, although using internal resources to support pirated software clearly has some impact on a using organization. Nor did we quantify the economic benefits of technology-driven economic growth, even though other studies indicate that a 10 percent rise in IT spending growth can lead to a 13 percent rise in GDP growth.

Q. What makes our project different from other studies?

A. There are a number of methodology differences, but mostly our use of IDC Worldwide Black Book numbers as a basis for our Economic Impact Model gives us an extremely solid basis for developing economic and piracy impact calculations. Also, we don't include what economists call "indirect" economic impacts – such as benefits to travel or logistics companies serving IT firms.

Q. Isn't there an economic benefit from pirated software?

A. Yes. There is always an economic benefit from something that is "free." However there are also often hidden costs. It might be nice if gasoline was free, but not if you had to drive to the tanker yourself, store a year's supply in your garage, and do all the repair and maintenance that you might have gotten done at a local gas station. The intent of this study is to point out what the benefits are from lowering piracy rates. We believe these benefits – plus the others not quantified in productivity and the value of a strong local software industry – outweigh any economic benefits from piracy.

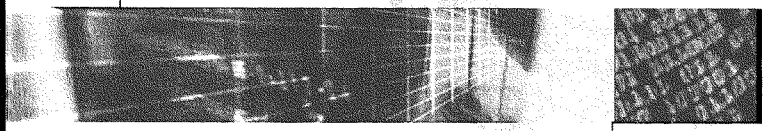
Q. If piracy rates are lowered, won't users simply stop using the software that was once "free?"

A. Yes, *some* will not use the previously pirated software, and some will substitute other software. But some will pay for it. However, a lower piracy rate will stimulate more economic activity (which can pay for more software) as well as more software production, more marketing, more R&D, and better products, which will spur more demand. We believe that these effects counter one another, making a linear relationship between lower software piracy and higher software-related spending, employment, and tax revenue justifiable. We have confirmed this by looking at the ratio of software spending to hardware spending in the countries in the study. Countries with higher piracy rates tend to have lower software-to-hardware ratios. In many cases, lowering the piracy rate by 10 percent or 20 percent to that of another country *still* yields a new level of software spending that is below that of the country with the lower current piracy rate.

Q. What does "local validation" mean. Do our numbers agree with government published statistics?

A. Validation means that someone in the government or a quasi-governmental agency in a position to understand the IT industry in the country has seen our data and understood it. Our numbers often won't agree with other published statistics because of different definitions. Our goal, if our numbers are different from published statistics, is to understand why.

FIRST ANNUAL BSA AND IDC GLOBAL SOFTWARE



PIRACY STUDY

BSA BUSINESS SOFTWARE ALLIANCE | IDC Analyze the Future

JULY 04

2004 PIRACY STUDY

Last year, the world spent more than $50 billion (US dollars) for commercial packaged software that runs on personal computers (PCs). Yet, software worth almost $80 billion was actually installed. For every two dollars' worth of software purchased legitimately, one dollar's worth was obtained illegally. The piracy rate — the number of pirated software units divided by the total number of units put into use — was 36 percent in 2003.

These are the results of this year's Business Software Alliance (BSA) study of global trends in software piracy. Although this is the 10th year in which BSA has studied software piracy around the globe, it is the first year in which the study has been conducted by IDC, the information technology (IT) industry's leading global market research and forecasting firm.

In the previous studies, the core input was software shipment data from BSA members and BSA member input on hardware shipments, the number of software applications running on PCs and local market conditions.

In this year's study, IDC used its proprietary statistics for software and hardware shipments, conducted more than 5,600 interviews in 15 countries to gain a better understanding of the amount of software running on computers and used IDC analysts to review local market conditions. With ongoing coverage of hardware and software markets in more than 65 countries, and with 60 percent of its analyst force outside the United States, IDC provided a deep and broad information base from which to develop the 2003 piracy rates.

By using market data as the basis for the study, IDC was also able to extend BSA's view of piracy beyond PC software to categories not covered in previous studies, such as operating systems, consumer-oriented software and local-language software. These additional categories expanded the universe of software covered by a factor of two.

The results confirm that software piracy continues to be a major challenge. Because of the change in study methodology and coverage, one cannot accurately compare last year's piracy rates to this year's rates. However, anecdotal information from IDC analysts in the field around the world would indicate that, in 2003, software piracy increased.

THE GLOBAL PICTURE

Figure 1 below shows the relative ranking by piracy rate of six global regions, which consist of 86 countries and six sub-regions as categorized by IDC.

The Asia Pacific region ranks lower in piracy than the other emerging regions, despite the fact that three of the top four pirating countries (Vietnam, China and Indonesia) are in the region. The reason for this is that two countries with relatively low piracy rates — Japan and Australia — bring down the average.

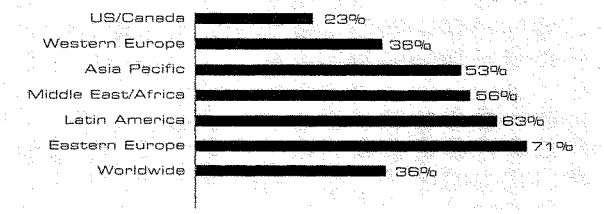
There are a number of factors that can contribute to regional differences in piracy — from software prices relative to income and the strength of intellectual property protection to the availability of pirated software and cultural differences. In addition, piracy is not uniform within a country; it varies from city to city, industry to industry and demographic to demographic.

Unfortunately, the high-piracy regions are also the high market-growth regions. The IT market in the developed world is growing by less than 4 percent today; it is growing closer to 20 percent in high-piracy countries like China, India and Russia. The emerging markets in Asia Pacific, Latin America, Eastern Europe, the Middle East and Africa account for more than 30 percent of PC shipments today, but less than 10 percent of PC software shipments. If piracy in the high-piracy countries does not begin to drop, IDC predicts that the worldwide average will increase.

In fact, as the PC software market grows from $50 billion to more than $70 billion over the next five years, at current piracy rates, IDC predicts that the retail value of pirated software will grow to more than $40 billion.

Table 1 shows the 20 countries with the highest piracy rates and the 20 countries with the lowest piracy rates.

Piracy Rate by Region figure 1



Software Piracy Rankings table 1

Top 20 Pirating Countries		Bottom 20 Pirating Countries	
China	92%	United States	23%
Vietnam	92%	New Zealand	23%
Ukraine	91%	Denmark	26%
Indonesia	88%	Austria	27%
Russia	87%	Sweden	27%
Zimbabwe	87%	Belgium	28%
Algeria	84%	Japan	28%
Nigeria	84%	United Kingdom	28%
Pakistan	83%	Germany	30%
Paraguay	83%	Australia	31%
Tunisia	82%	Finland	31%
Kenya	80%	Switzerland	31%
Thailand	80%	Norway	32%
El Salvador	79%	Netherlands	33%
Nicaragua	79%	UAE	34%
Bolivia	78%	Canada	35%
Guatemala	77%	Israel	35%
Dominican Republic	76%	South Africa	36%
Lebanon	74%	Reunion	36%
India	73%	Czech Republic	40%

Many of the countries in the top and bottom rankings will not be surprising. However, some are worth noting:

- India's software piracy rate of 73 percent may seem high, given its big business exporting custom-developed software[1]. While the government has enacted tough copyright laws and added amendments to help enforcement, pirated software is still widely available.
- France and Italy are *not* among the list of 20 countries with the lowest piracy rates, despite being major developed IT markets. On the other hand, both have significantly large numbers of small business and consumer PC users, which typically are segments with higher piracy.
- The United Arab Emirates (UAE) is the only Middle Eastern country with a relatively low piracy rate, 33 percent. This is attributable to deliberate attempts to adopt stronger intellectual property protections in the 1990s, when a new generation of policymakers came into power and began luring foreign investments.

Some other countries are notable for their absence on the lists. Once considered high-piracy locales, Taiwan, Ireland, Portugal and Puerto Rico, have rates below the median.

On the other hand, there are a number of countries with higher-than-the-median piracy rates. Of the 86 countries that IDC examined, one in five had a PC software piracy rate above 75 percent, and one in three had a piracy rate of 70 percent or more. More than half the countries had a piracy rate above 60 percent.

[1] India's IT exports are more than three times the size of its domestic IT market.

For every two dollars' worth of software purchased legitimately, one dollar's worth was obtained illegally.

THE IMPACT OF PIRACY

Software piracy has many negative economic consequences: local software industries crippled from competition with high-quality pirated software from abroad, lost tax revenues and jobs from lack of a legitimate market and costs of ineffectual enforcement. These costs reverberate up and down the supply and distribution chains.

In an April 2003 economic impact study conducted for BSA[2], IDC concluded that lowering piracy by 10 percentage points over four years would add more than 1 million new jobs and $400 billion in economic growth worldwide.

In this study, IDC took a very narrow view of the economic impact of software piracy and tabulated only the retail value of pirated software, labeled losses in Figure 2 and Table 2. These losses were calculated using the known size of the legitimate software market in a country or region and using the piracy rate to derive the retail value of the software that was not paid for[3].

Figure 2 shows the value of pirated software by region.

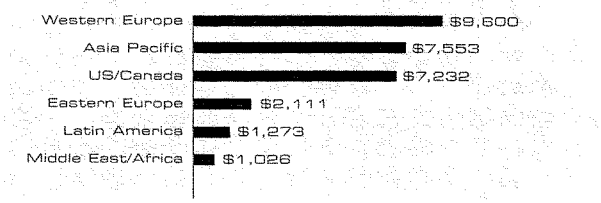
Western Europe, the United States and Canada experienced significant dollar losses with low piracy rates. This can be attributed to the size of the market. In big markets, small piracy rates can still add up to large losses.

One way to understand the relationship of piracy losses to the piracy rate is to look at the two

[2] Available at http://www.bsa.org/idcstudy

[3] The "retail" value of software that came bundled with a personal computer was considered to be the share of the retail price of the system attributable to software. Software that was legitimately free (such as shareware or some open source software) was not considered pirated.

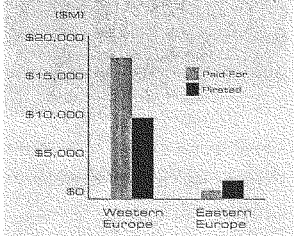
Dollar Losses by Region ($M) figure 2



Europes, Western and Eastern. Figure 3 shows the legitimate software market compared to the pirated software market. The legitimate software market in Western Europe is almost 20 times the size of the legitimate software market in Eastern Europe, yet the losses from software piracy are only four times as much.

The message is that no country is immune from the impact of software piracy. Table 2 shows the countries with the greatest dollar-value of pirated software.

Piracy Rate vs. Losses figure 3



Ranking by Software Piracy Losses table 2

Piracy of $100 Million or More

	$M		$M
United States	$6,498	Switzerland	$ 293
China	$3,823	Sweden	$ 241
France	$2,311	Belgium	$ 240
Germany	$1,898	Denmark	$ 165
Japan	$1,633	Indonesia	$ 157
United Kingdom	$1,601	Norway	$ 155
Italy	$1,127	Finland	$ 148
Russia	$1,104	South Africa	$ 147
Canada	$ 736	Thailand	$ 141
Netherlands	$ 577	Taiwan	$ 139
Brazil	$ 519	Malaysia	$ 129
Spain	$ 512	Turkey	$ 127
Korea	$ 462	Saudi Arabia	$ 120
Mexico	$ 389	Other CIS	$ 112
India	$ 367	Austria	$ 109
Australia	$ 341	Czech Republic	$ 106
Poland	$ 301	Hong Kong	$ 102

PIRACY TRENDS

Because this year's study covered more categories of software and used a different methodology to compute piracy rates and losses, the results from last year and this year are not comparable.

But is piracy getting better or worse?

Efforts continue by BSA and others to stem the growth of piracy, including implementation of education programs and policy initiatives to fight for stronger copyright laws and enforcement of those laws. These are effective inhibitors to piracy.

Unfortunately, there are also forces acting to increase piracy. These include the economic slowdown in some geographies, the influx of new users in emerging markets — mostly consumers and small businesses — and the increased availability of pirated software, particularly over the Internet and from peer-to-peer (P2P) networks.

Without strong online copyright laws and enforcement of those laws, online piracy — via spam, auction sites and P2P systems — will continue to grow alongside increases in Internet usage. By the end of last year, there were 700 million Internet users. By the end of 2007, there will be more than a billion. Many of these new users will come from emerging markets; China alone will add almost 90 million new Internet users over the next three years.

Online piracy is facilitated by increases in transmission speeds, since faster connections enable users to send and download larger files (such as software programs) more quickly. Today, there are 70 million broadband households. By the end of 2007, there will be an additional 100 million.

While IDC field research has provided helpful data on the piracy problem, it is not sufficient enough to quantify the exact amount by which piracy might have gone up in 2003. However, based on continued feedback and anecdotal information from IDC analysts in the field, IDC believes piracy worldwide went up one to two percentage points from 2002 to 2003.

A compilation of piracy rates and losses for 2003 follows in Table 3.

2003 Global Software Piracy table 3

Region	Country	Piracy Rates	Piracy Losses ($M)
Asia Pacific	China	92%	$3,823
	Vietnam	92%	$41
	Indonesia	88%	$157
	Pakistan	83%	$18
	Thailand	80%	$141
	Other AP	78%	$37
	India	73%	$367
	Philippines	72%	$55
	Malaysia	63%	$129
	Hong Kong	52%	$102
	Korea	48%	$462
	Singapore	43%	$90
	Taiwan	43%	$139
	Australia	31%	$341
	Japan	29%	$1,633
	New Zealand	23%	$21
	Regional Average/Total	53%	$7,553
Eastern Europe	Other CIS	91%	$112
	Ukraine	91%	$92
	Russia	87%	$1,104
	Romania	73%	$49
	Other EE	72%	$61
	Bulgaria	71%	$26
	Croatia	59%	$44
	Lithuania	58%	$17
	Poland	56%	$301
	Latvia	57%	$18
	Estonia	54%	$14
	Slovenia	52%	$32
	Slovakia	50%	$40
	Hungary	42%	$98
	Czech Republic	40%	$108
	Regional Average/Total	71%	$2,111
Latin America	Paraguay	83%	$9
	Other LA	81%	$7
	El Salvador	79%	$4
	Nicaragua	79%	$1
	Bolivia	78%	$11
	Guatemala	77%	$9
	Dominican R	78%	$5
	Honduras	73%	$3
	Venezuela	72%	$55
	Argentina	71%	$68
	Panama	69%	$4
	Costa Rica	68%	$17
	Ecuador	68%	$11
	Peru	68%	$31
	Uruguay	67%	$10
	Chile	63%	$68
	Mexico	63%	$368
	Brazil	61%	$519
	Colombia	53%	$61
	Puerto Rico	46%	$11
	Regional Average/Total	63%	$1,273

Continued on page 8

2003 Global Software Piracy table 3

Continued from page 7

Region	Country	Piracy Rates	Piracy Losses ($M)
Middle East/Africa	Other ME	92%	$51
	Zimbabwe	87%	$8
	Algeria	84%	$55
	Nigeria	84%	$47
	Tunisia	82%	$29
	Other Africa	81%	$33
	Kenya	80%	$12
	Lebanon	74%	$22
	Morocco	73%	$57
	Egypt	69%	$56
	Kuwait	68%	$40
	Turkey	66%	$127
	Jordan	65%	$15
	Oman	65%	$11
	Bahrain	64%	$18
	Qatar	63%	$13
	Mauritus	61%	$4
	Cyprus	55%	$8
	Saudi Arabia	54%	$120
	Malta	46%	$2
	Reunion	39%	$1
	South Africa	36%	$147
	Israel	35%	$69
	UAE	34%	$29
	Regional Average/Total	56%	$1,026
US/Canada	Canada	35%	$736
	United States	22%	$6,496
	Regional Average/Total	23%	$7,232
Western Europe	Greece	63%	$67
	Italy	49%	$1,127
	France	45%	$2,311
	Spain	44%	$512
	Ireland	41%	$71
	Portugal	41%	$66
	Netherlands	33%	$577
	Norway	32%	$155
	Finland	31%	$148
	Switzerland	31%	$293
	Germany	30%	$1,899
	Belgium	29%	$240
	United Kingdom	29%	$1,601
	Austria	27%	$109
	Sweden	27%	$241
	Denmark	26%	$165
	Regional Average/Total	36%	$9,600
World Total	All Regions	36%	$28,794

STUDY METHODOLOGY

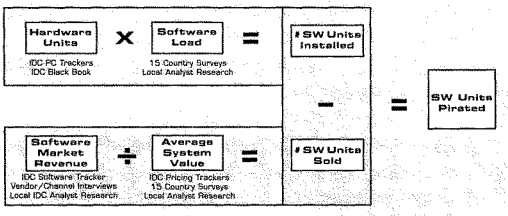
IDC and previous studies conducted for BSA used the following basic research architecture to measure piracy rates and dollar losses.

1. Determine how much packaged software was put into use in 2003.
2. Determine how much packaged software has been paid for during the year.
3. Subtract one from the other to get the amount of pirated software.

Once the amount of pirated software is known, the piracy rate can be determined as the percentage of total software installed that was pirated.

Figure 4 shows the general method IDC used to determine how much software was added in 2003 and how much was paid for. The text under each box refers to the sources of the data inputs.

Methodology At-A-Glance figure 4



Note: All inputs and output reflect CY 2003 software (SW) activity.

Expanded Software Categories Examined

One of the major differences between this year's study and those in previous years is in the software categories measured.

In previous studies, only business applications software (such as general productivity or office software, professional applications and utilities) were examined.

In this year's study, IDC also examined operating systems and consumer applications such as PC gaming, personal finance and reference. As a result, this year's study looks at a market that is significantly larger than the market studied in previous years.

For instance, in 2002, the published value for pirated PC software of $13.1 billion and piracy rate of 39 percent would imply a $20.5 billion market for non-pirated software. This year, the market for non-pirated PC software in the IDC study was more than $50 billion.

This examination of a larger universe in this year's study had some minimal impact on piracy rates, but it has a significant impact on the calculation of the value of software losses. If the market studied is twice as big, losses will be twice as big given the same piracy rate.

The Step-by-Step Process

The following information provides a more detailed description of IDC's methodology process and its definition of terms.

PC shipments
These are needed to determine the total amount of software put into use in 2003. Quarterly, IDC collects detailed PC shipment tracking data on 60+ countries. For the additional 30+ countries and markets, the data was either collected in-country or modeled regionally based on IDC's rest-of-region estimates. The basic tracking data is generated from suppliers, including local suppliers. IDC's definition of a PC includes desktops, laptops and tablets, but excludes hand-helds and PCs used as servers, either singly or in clusters.

PC installed base
The installed base is captured as part of IDC tracking exercises.

Software revenues
These are captured annually in 60+ countries by IDC software analysts around the world. Revenues are gathered from interviews with in-country suppliers and cross-checked with global numbers and financial statements. For the countries not normally covered by IDC, the data were either collected in-country or modeled regionally based on IDC's rest-of-region estimates.

Software shipments (legitimate)

These were derived using average system values estimated country-by-country and regional analysis for five software categories (e.g., collaboration, office, security, operating systems, other). Prices were gathered from IDC's pricing trackers, local research and interviews with the channel. They included adjustments for OEM and channel-loaded software as well as software from local suppliers. Software unit shipments were derived from taking revenues and dividing by the average system value. These shipments represent the legitimate software installed during the year.

Software load

This is the amount of software units installed and/or pre-installed (OEM) on PCs during the year. To obtain the number of software units for each type of hardware platform, we surveyed consumers and businesses in 15 countries: China, Malaysia, Taiwan, Spain, Romania, Brazil, Bolivia, Chile, Colombia, Mexico, Costa Rica, Dominican Republic, Guatemala, Kuwait and the United States. The results of these surveys were used to populate IDC's input models for the other countries. Within the software load, IDC accounted for:

- Software running on new computers
- New software running on existing computers
- Software obtained from retired computers
- Software obtained for free as shareware or open source
- Software running on Windows and non-Windows OS

Total software base

This is the total amount of software, legitimate and pirated, installed during the year. It is obtained by multiplying the number of PCs getting new software during the year by the average number of software packages per PC that were installed in 2003.

Pirated software

This is this difference between paid-for or legitimate packaged software units and the total software base.

Piracy rate

The is the percentage of the total packaged software base that is pirated.

Regional piracy rate

This is the piracy rate for the region based on the amount of pirated software in the region divided by the total amount of software installed in the region during 2003.

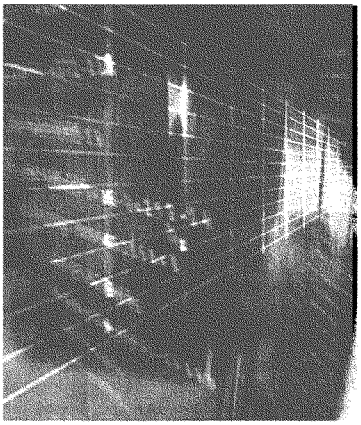
Value of pirated software

This is the retail value of pirated software. It is calculated using the size of the legitimate software market and the piracy rate[4].

[4] The actual formula is this: Value of Pirated Software = (Legitimate Market)/ (1 - Piracy Rate) – Legitimate Market

By using this calculation, IDC derived what should be considered the end-user spending value of pirated software. For shrink-wrapped software sold in stores, it is the retail price, and for factory- or channel-loaded software, it is the share of retail system value attributed to that software.

IDC's value of pirated software represents the "losses" to the total industry, including the channel, retailers and local in-country software vendors.



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Chairman TOM DAVIS. Thank you.

Let me ask a question. Aside from all the intellectual and economic arguments, how good are some of these pirated things that come through, the software?

Mr. CRESANTI. It is perfect. It is 100 percent perfect. The only thing that has been stripped out are the protections that we have put in place to prevent duplication of.

Chairman TOM DAVIS. So they have gotten very good now duplicating the stuff. I mean, at one point there was a time when you could take some of the software, and it had bugs in it and the like.

Same with the movies?

Mr. MALCOLM. It varies in quality, depending on how it was pirated, but well over 90 percent of the pirated movies begin with a camcorder, and the trend is for the pirates to use more sophisticated camcorders and more sophisticated means of getting camcorder product that is leading to increased quality.

Chairman TOM DAVIS. How do they get this stuff before it is even released in the theaters?

Mr. MALCOLM. There can be a variety of ways, Mr. Chairman. Probably the most common way has to do with before a movie comes out in a theater—sometimes, by the way, movies open in other countries before they open here. But before a movie will come out, a studio, despite the extraordinary lengths to which they are going to protect their product, will do promotional screening, screening for critics, screening with test audiences. Sometimes films will be in post-production houses that will be preparing publicity or working on editing and pirates will pay bribes and pay a lot of money to send in camcorders to those screenings or to pay off projectionists or pay off insiders to get that product.

Chairman TOM DAVIS. The GAO report points out that one of the challenges in the optical media sector is the huge price difference between legitimate and the pirated products. This is not something the Government can change. Any suggestions how we meet that challenge?

Mr. MALCOLM. Well, I would start out by saying that, for instance, with respect to the Lord of the Rings that you said you pay the equivalent of $6.50, that you dramatically overpaid. The price differential between a legitimate product, assuming legitimate product has been distributed for home distribution, and a pirated product is very, very great. You are already seeing that the movie industry has been quite robust in terms of narrowing windows for release. There are online organizations where you can have legitimate video on demand. The prices of both CDs and DVDs have come down.

However, when you are a pirate organization that is paying slave labor, not paying any taxes, you don't care about health benefits, you pay no tariffs whatsoever, where your biggest cost is probably the bribes that you pay, you can cost your product very low.

Chairman TOM DAVIS. In many of the countries where counterfeited sales are the highest, consumers see no ethical problems in purchasing these pirated goods. They also can't afford sometimes the higher prices of the authentic goods. To what extent are foreign governments using public awareness campaigns? I have seen it here when I have gone to the theaters. I remarked earlier. Are the

other countries doing the same; are they showing it? Should they do more? And can industry help or directly be involved in those efforts?

Mr. MALCOLM. Well, we are directly involved in those efforts. I will let Mr. Papovich speak for the RIAA. We are directly involved in those efforts. Some countries, for which we are very grateful, are doing a lot. France, for instance, at the Cannes Film Festival, talked about piracy extensively, and they are really taking the lead in terms of trying to highlight this issue in terms of harming French products, French culture, but also intellectual property rights in general. There are other countries that are, as you know, woefully deficient in their efforts. You have to really sort of break it down country by country, but obviously most countries could do a lot more.

Chairman TOM DAVIS. Mr. Papovich, before you reply, also, are there countervailing pressures in some of these countries as they develop their own movie industry and their own recording industry, that start saying we need some protections here to help our legitimate artists and creators as well?

Mr. MALCOLM. The economies that thrive do so because they recognize the value of property, both tangible and intellectual property. And as we frequently argue, sometimes with success, that those people who don't take a strong stand on IPR crime are ultimately killing themselves, because they are causing investment to dry up and express no interest in those countries. No one will invest in developing property in a country if they don't think anybody is going to do anything to protect that property. Eventually, some countries that have developed goods and services and intellectual property that is worthy of protection, they get it and they beef up their efforts.

Chairman TOM DAVIS. Mr. Papovich.

Mr. PAPOVICH. As I said in my oral statement, a huge problem has been either indifference or corruption in government ministries in other countries, and this has manifested itself in us seeing indigenous cultural industries dry up. Brazil is a good example. I would differ a little bit with what Mr. Yager said previously. I don't think there has been that much progress in Brazil. Brazil and Mexico are two countries which once had really thriving sound recording industries, industries who produced lots of musical entertainment, that have seen tremendous reductions in that because of government indifference or corruption.

And I don't know if the theory holds that as other countries develop their own intellectual property industries, it necessarily will mean improvements. I think in some instances it will, but in other instances—it just baffles the mind. I don't understand why in Brazil and Mexico, the governments see so little importance in protecting their own and foreign intellectual property.

Chairman TOM DAVIS. What retaliation could we do on this?

Mr. PAPOVICH. Well, there are two answers, I suppose. One is we do already, the U.S. Government has done some. Frankly, the problem is, as has been said already, our Government has other foreign policy considerations with respect to these countries, and quite often the trigger doesn't get pulled because while our Government

cares about these things, there are other important issues at stake that would be disrupted by pulling the trigger.

We also have limitations with respect to the World Trade Organization; we can't just raise tariffs or impose quotas on goods coming from another country, except in certain prescribed processes set out by the WTO.

Mr. MALCOLM. Mr. Chairman, may I just elaborate very briefly on that?

Chairman TOM DAVIS. Yes.

Mr. MALCOLM. I was going to say in some countries, as well, this pirate market is a huge underground economy, and we have actually seen instances in which the people who are engaging in piracy will have their own PR effort to say why are you harming the citizens of your country who are trying to eek out a living, just to protect American industries? So sometimes governments are caught between a rock and a hard place, but I don't disagree with anything Mr. Papovich said.

Chairman TOM DAVIS. Ms. Watson, any questions?

Ms. WATSON. No.

Chairman TOM DAVIS. Mr. Cooper.

Mr. COOPER. Thank you, Mr. Chairman.

Mr. Papovich just mentioned the indifference and corruption of other nations. That is a pretty strong statement, but I think you hit the nail on the head. What I am worried about is the indifference of our Government in facing these other nations. You have worked with the USTR. I am a big fan of Bob Zellick; I think he is great. But I have never been party to these long negotiations.

Can you tell us what really happens behind closed doors, when they have a dozen issues to discuss? Because these intellectual property issues seem to be, at best, back burner. Most of you gentlemen have asked that we fund an office within USTR to give IP issues more prominence, perhaps an office within the State Department so they can have more prominence there. All this spells back burner, as does this hearing, when we can't even fill the room with folks who are concerned about this massive systematic theft of U.S. property. So what happens behind closed doors with the U.S. Trade Representative and these various negotiators?

Mr. PAPOVICH. Actually, in the negotiations I would say it is different than that. In fact, intellectual property takes a very prominent position in the negotiations, and other governments complain all the time about how much attention is paid by the U.S. Government when it comes to trade agreements.

It is in the enforcement that the problems arise. The other country takes on lots of very good commitments and then fails to adequately implement, and it will break down when our representatives operating in those countries use the provisions that those agreements require by going into court in those countries and asking for criminal prosecution or asking for big civil damages, and the judges won't do it or the prosecutors won't even take the case. So it is more complex than just what is in the agreements; it is getting these other countries to actually live up to what they commit to.

Mr. COOPER. But when we see a systematic lack of enforcement, what actions do we take in response?

Mr. PAPOVICH. That is when we go back to our Government asking for help.

Mr. COOPER. So our own Government isn't helping our own industries enough to solve this problem?

Mr. PAPOVICH. I would say enough, not helping our industries enough. I don't want to say, and I won't say, that our Government is not trying to help. The people who are employed to do this try very hard to help; there is just not nearly enough of them. I will leave it at that; there is just not nearly enough of them. And they also don't have the clout, if it comes to a major conflict, to impress upon the other government that this has to be changed.

Mr. COOPER. In one of your statements you said you were coming to Congress to get us to encourage the executive branch to do more in this area. Well, they are a separate branch of Government. We can encourage them, we can pass budgets that give them more funding, but if they don't have the will to protect American industry from this rampant theft, American voters need to know about that, because I think most voters are interested in protecting American property and making this a higher priority.

Mr. MALCOLM. If I may respond briefly. Obviously, both Mr. Papovich and I recently were with the administration, but I would say that I don't think that it is a question of a lack of will on our Government's part. The fact that there are requests for additional funding doesn't have anything to do with anything being on the back burner; I think it bespeaks to the magnitude of the problem.

Mr. COOPER. Where is the administration request for funding for a separate USTR office on IP or a State office on IP, or these other things that you are requesting us to fund? Where is it in the administration's budget?

Mr. MALCOLM. I no longer speak for the administration, so I won't even purport to do so.

Mr. COOPER. Well, they haven't requested it, right? You are having to come to us to ask for it. That is an indication of a lack of will.

Mr. MALCOLM. Mr. Papovich having been at USTR and me being at DOJ, I can tell you that it was on every bilateral or multilateral law enforcement convocation or trade convocation. IPR enforcement was high on the agenda. This is a pervasive international problem that needs a lot of resources, but I do not think that it is a lack of good will or somehow a back burner issue on behalf of the administration. I can tell you that not only having been in the administration, but having dealt with administration officials in my current capacity.

Mr. COOPER. Well, I am sure there are a few good-hearted people who are trying to do the right thing, but overall it looks as if the administration has used this issue for window-dressing. They do enough so that it looks like we are making an effort, but I don't know any other area of U.S. foreign policy where we have been so systematically ineffective.

Mr. MALCOLM. I would respectfully disagree.

Chairman TOM DAVIS. The gentleman's time has expired.

Let me just, first of all, thank you. We did ask the administration to appear today, and they chose not to do that, but we are

working with them on some things and we will hold further hearings on this as we move forward.

Mr. COOPER. Mr. Chairman, would you yield for questions?

Chairman TOM DAVIS. I would be happy to.

Mr. COOPER. I am glad that you asked the administration to come, but I would think that their failure to show up is another sign of their lack of priority, lack of interest in this issue.

Chairman TOM DAVIS. Well, we are working with them on a lot of legislative procedures. I would have preferred to have them show up today too. This is a massive problem that is not just a problem for the United States; it is a problem worldwide, as has been noted before. And this hearing, I think, has brought out some of the failings we have had at the governmental level and some of the successes we have had at the governmental level, and some of the work we still have to do.

But I guess I would just ask where do we go when suing in other countries? There are legal systems in other countries. We get the agreements intact that our trade leaders negotiate. What happens when you sue in other countries and fine people?

Mr. PAPOVICH. China is the best example there is: a huge problem; fair amount of indifference by the government. The Chinese have, in their criminal code, the standards for initiating a criminal investigation and prosecution of intellectual property pirates. They have written it in such a way, they have established a threshold over which one must climb in order to have a prosecution initiated that is nearly impossible to meet.

One of the things that has been a central demand of us on our executive branch and, to their credit, has been the central demand of our executive branch on the Chinese, is that this threshold has to be either eliminated or substantially reduced so the criminal prosecutions can be initiated in China. The Chinese are supposedly, right now, as we speak, rewriting the interpretation that establishes this threshold. We are waiting with baited breath to see what comes out of their process.

I think the gentleman from the GAO said the USTR says they are going to conduct a Special 301 out-of-cycle review later this year, and it will be for the purpose of evaluating this. So if the Chinese change the standard, lower the threshold, we have a shot—there is still a question of will, but we have a shot of getting significantly more criminal prosecutions of pirates in China. Right now there are almost none. Almost none, despite all of the piracy that happens in China. You can get administrative fines imposed, modest financial penalties, but that is. You can't get anyone put in jail, or it is very difficult to get anyone put in jail for copyright piracy.

Mr. MALCOLM. Mr. Chairman, if I may. There are really four pillars to this: you need effective laws, you need effective investigations, effective prosecutions, and deterrent sentencing. That is with respect to criminal enforcement. Many countries now are compliant, they have the first, but the other three are lacking, and there are problems at each step along that cycle.

With respect to civil lawsuits, there are organizations, our organization, the RIAA, that engage in civil lawsuits to protect their property rights. People such as Congressman Simmons' constituent

in Connecticut, it is tough for them. The answer to the question is in some countries the civil litigation process works fairly well and in others the court system is positively byzantine.

Chairman TOM DAVIS. Well, thank you very much. I think you have given a clarity to the work that has been accomplished and the work that needs to be done, the massiveness of this problem, and I hope it has been helpful not just to our members, but to people watching as well. We look forward to continue to work with you on this. Thank you very much.

The hearing is adjourned.

[Whereupon, at 1:05 p.m., the committee was adjourned.]

[NOTE.—The GAO report entitled, "Intellectual Property, U.S. Efforts Have Contributed to Strengthened Laws Overseas, But Challenges Remain," is on file with the committee.]

[The prepared statement of Hon. Elijah E. Cummings follows:]

Statement of Congressman Elijah E. Cummings
House Government Reform Committee
"Intellectual Property Piracy:
Are We Doing Enough to Protect U.S. Innovation Abroad?"
September 23, 2004 at 11:00 a.m.
2154 Rayburn house Office Building

Thank you, Mr. Chairman for holding this hearing, which will give us the opportunity to address U.S. efforts to combat international piracy of intellectual property. Because the U.S. is the world's leading producer of intellectual property, this hearing is very important in determining the measures needed to insure international cooperation in the elimination of piracy.

With the advent of the personal computer, the Internet, and new technology, it has become increasingly easier for intellectual property to be accessed on the Internet and copied onto digital media like CDs and DVDs, which can then be easily duplicated and sold. The Recording Industry Association of America (RIAA) estimates that one out of every three CDs sold in the world is pirated; the Motion Picture Association of America (MPAA) estimates about $3 billion in losses due to pirated movies; and, the Business Software Alliance (BSA) estimated its 2003 losses to piracy to be about $29 billion. These monetary losses are by no means insignificant. Not only do they reflect gaps in the system established to prevent this, but they also prove that

international enforcement of these rights is not adequate to combat piracy of intellectual property.

Although trade agreements and international forums have set international standards and protections for international property rights (IPRs), and more than 80 nations have copyright law in some form, enforcement of these laws is still a major challenge. The Government Accountability Office (GAO), confirmed in its report titled, "Intellectual Property - U.S. Efforts Have Contributed to Strengthened Laws Overseas," that piracy and counterfeiting of intellectual property are a serious problem. The GAO also found that, in spite of Federal agencies' active engagement in combating piracy and their ability to persuade foreign governments to strengthen their intellectual property laws, actual enforcement of these laws is often lacking due to factors ranging from corruption to lack of local understanding of the laws.

I know that a representative from the GAO will testify before us today, and I look forward to hearing more about this report and the recommendations GAO has for strengthening efforts to protect U.S. digital media and intellectual property.

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