Responses of the Federal Bureau of Investigation to Questions for the Record Arising from the June 22, 2011, Hearing Before the Senate Committee on the Judiciary Regarding Oversight of Intellectual Property Law Enforcement Efforts

Questions Posed by Senator Grassley

1. In your opinion, what has been the most successful aspect of the PRO-IP Act in achieving its goals of comprehensive intellectual property rights enforcement?

Response:

The Prioritizing Resources and Organization for Intellectual Property Act of 2008 (PRO-IP Act) has enabled the FBI to build a robust and effective intellectual property (IP) enforcement program that focuses on the most significant threats to U.S. economic and national security interests. The funding made available by the PRO-IP Act has enabled the FBI to dedicate approximately 51 Special Agents to intellectual property rights (IPR) and to establish an FBI unit dedicated to IPR. The physical placement of the IPR unit in the National IPR Coordination Center (hereafter IPR Center) has been particularly helpful, fostering increased collaboration among the represented agencies. The IPR unit manages several aspects of the FBI's response to IPR challenges, including case initiation and investigation, case management, training and outreach, intelligence fusion, research, and other tactical and strategic initiatives. The IPR unit also addresses international and complex IPR matters and deploys to FBI field offices as needed to assist in IPR cases.

2. In your opinion, what is the greatest challenge that the FBI faces with respect to IP enforcement? What is the greatest challenge that we face with respect to IP theft?

Response:

The greatest challenges in IPR enforcement arise from the fact that IP crime takes place in the global economic market and, therefore, addressing it requires coordination with international partners. Countries place different priorities on IPR enforcement because their laws differ and the impact of IPR violations is not uniform from country to country. For example, infringements that are considered high priority in one country or region may not be viewed as serious in another country or region.

The most significant challenges with respect to IP theft, which are predictably related to these law enforcement challenges, include the role played by international organized crime, the large-scale data breaches that can threaten U.S. economic security, and online fraud.

3. The PRO-IP Act increased penalties for certain intellectual property crimes. How effective have stricter penalties been in deterring intellectual property rights violations?

<u>Response</u>:

We are not aware of existing metrics for quantifying the impact of increased penalties on the incidence of criminal activity, and it is always difficult to determine what factors have led to both increases and decreases in crime. This is particularly true in the IPR arena, where the scope and nature of a given type of crime can change rapidly along with changes in technology and other factors. So, even if one factor, such as stricter penalties, may serve as an effective deterrent, other factors may exert even greater influence.

4. Are there any additional tools that you'd like to see enacted into law that would assist you in your efforts to protect intellectual property rights, both here and abroad?

<u>Response</u>:

The FBI's ability to investigate and counter IPR violations could be bolstered through a range of legislative provisions. These recommendations are described in detail in the "Administration's White Paper on Intellectual Property Enforcement Legislative Recommendations," released in March 2011 and available online. Among these recommendations are the following:

We believe the integrity of the sentencing structure is enhanced when we address serious crimes with serious punishments. For example, economic espionage is one of the most serious IP violations, but violators face a statutory maximum sentence of just 15 years in prison. In addition, given the importance of protecting the public from the risks associated with counterfeit pharmaceuticals and medical devices, cooperation from importers and manufacturers is essential. To obtain this cooperation, the White Paper recommends legislation requiring that those entities notify the Food and Drug Administration and other relevant agencies when they discover counterfeit drugs or medical products.

Finally, the White Paper recommends extending wiretap authority to criminal copyright and trademark offenses subject to the existing legal protections that apply to wiretaps for other types of crimes. This authority would enhance our ability to effectively investigate those offenses, including by targeting organized crime and the leaders and organizers of criminal enterprises.

5. The federal government has a finite number of resources to conduct its law enforcement investigations and prosecutions. Yet piracy and counterfeiting are surging all over the world, as well as online. Do you think that rights holder actions can alleviate some of the burdens on federal law enforcement and effectively combat IP theft?

Response:

Rights holders who have the knowledge and ability to detect, prevent, and protect against IP crimes could alleviate some of the burdens on federal law enforcement, while those who lack the necessary experience or resources will continue to seek law enforcement assistance. Many of the criminals and criminal organizations that routinely profit from IP violations are so broadly based or sophisticated that they cannot be significantly affected by the efforts of individual rights holders. In these cases, and when these organizations are involved in other criminal activity, such as drug trafficking, forced labor, and fraud, federal law enforcement involvement may be needed to fully and safely investigate and prosecute the IP crimes.

6. What kinds of trends are you seeing with respect to intellectual property theft, piracy and counterfeiting? Are we able to keep up with the evolving methods and technologies utilized by IP criminals? Are the laws on the books able to keep up with the criminals?

Response:

As IP criminals become more sophisticated, they are increasingly using the Internet to conduct their activities and the types of IP violations are becoming more varied. While FBI investigators have the technical ability to address high-tech crimes, this work can be labor intensive. In addition, the Internet allows criminals to commit extremely high numbers of these crimes, and the volume of the resulting forensic work poses significant law enforcement challenges. The issues currently being addressed include:

Digital Piracy through Online Channels. The Internet permits the immediate digital distribution of pirated media content through "streaming." Many of the illegal audio and video streaming sites operate overseas to avoid U.S. law enforcement efforts and are highly profitable, bringing in millions of dollars in subscription fees and advertisement revenues, while providing no compensation to the owners of the copyrighted content being pirated. The Administration has proposed updating the law to make clear that, in appropriate cases, infringement by streaming is a felony.

Greater Complexity of Counterfeit Products. As manufacturing and supply chains become global and decentralized, the types of products being counterfeited, the materials supporting counterfeiting enterprises, and the techniques used to counterfeit are all becoming more advanced. Consumer goods such as purses and shoes are no longer the primary counterfeit products. Instead, products such as circuit breakers, integrated circuits, automotive components, and defense industry components must be scrutinized, since all can be counterfeited and some may pose a great hazard to both national security and individual consumers. Even this scrutiny has become more challenging, because it is becoming more difficult to distinguish counterfeits from authentic goods without conducting appropriate tests, such as the x-raying of computer chips.

Supply Chain Vulnerabilities. Counterfeiters are actively seeking opportunities to exploit supply chain vulnerabilities, divert supplies, and evade measures designed to ensure supply chain integrity. For example, some counterfeiters engage in "cyber-squatting," where illegitimate sellers operate seemingly official web sites, connecting unsuspecting consumers to counterfeit goods.

U.S. Fabrication of Infringing Goods. While a majority of the infringing goods are manufactured in other countries, manufactured generic goods may be shipped to the United States in parts and then fabricated here to circumvent legal constraints. For example, thousands of unmarked shirts might arrive in the United States in one package with counterfeit labels and infringing embroidery being applied thereafter.

Changing Importation Methods. The methods by which counterfeit goods are imported into the United States are changing, with products being routed through numerous countries before arrival here in order to disguise their countries of origin. This trans-shipping and drop-shipping misleads customs inspectors, impeding detection and enforcement efforts. Criminals are also dividing bulk shipments into multiple packages and sending them through smaller shippers and express mail services (such as FedEx and UPS) in order to avoid detection by customs inspectors.

Increased Challenges to Consumer Awareness. Although counterfeit goods were formerly sold in "secondary" or "aftermarket" venues, where customers knew they were purchasing infringing goods, they are increasingly being sold in the "primary" market, where the vendors and products appear to consumers to be legitimate. One alarming example of this shift is in the counterfeit pharmaceutical market, where the apparent authenticity of the medical products being sold can pose a serious threat to the public's health and safety.

Broader Participation in IP Crime. The enterprises involved in IP crime have become more diverse, with participants now including individuals, gangs, and organized crime syndicates. In addition to the diversity of the participants, the scale and scope of infringements have also become more varied. Investigators encounter both organized networks distributing pirated media at flea markets and individuals stealing trade secrets valued in the hundreds of millions of dollars.

7. What are the FBI's particular priorities with regard to intellectual property enforcement?

Response:

The FBI's highest priorities with respect to IP enforcement are to disrupt and dismantle international and domestic manufacturers and distributors engaged in IP crimes that pose immediate threats to health and safety, have a national security nexus, involve organized crime, or may exert significant economic impact.

8. FBI's new Intellectual Property Rights Unit is located at the IPR Center, and the FBI has been a partner of the IPR Center for over a year now. In what areas has the FBI's partnership with the IPR Center been most effective, and where can it improved?

Response:

As noted in response to Question 1, above, the physical placement of the IPR unit in the IPR Center has fostered increased collaboration among the represented agencies, allowing us to interact with our counterparts daily and engage in early coordination of investigations in which we have mutual interest. Although internal FBI network security restrictions currently require separation of the IPR

Unit from the rest of the IPR Center, we are seeking solutions that will permit a more open workspace, further enhancing and strengthening our partnership with other IPR Center agencies. Even with that impediment, though, there are significant benefits inherent in the collaboration facilitated by the Center, including the following.

• Frequent meetings allow participating agencies to chart the Center's strategic direction, discuss recently initiated investigations, review databases for any investigative overlap, initiate joint agency investigations when appropriate, and take other measures to streamline the investigative process and minimize reliance on limited resources.

• The FBI and the Center's Outreach and Training Unit coordinate their training and outreach closely to avoid a duplication of efforts, to enhance efficiency, and to ensure that we provide consistent messages. This coordination also allows us to ensure the proper staffing of training and outreach efforts and to make efficient use of the FBI's provision of instructors and travel funds to assist the Center's IPR training efforts.

• The FBI has established an Intelligence Fusion Group at the Center, the mission of which includes defining the IPR threat picture, sharing strategic intelligence, establishing joint collection requirements, and producing joint intelligence products.

9. Since the PRO IP Act, the FBI has hired 51 new IP-dedicated agents, most of which are supporting the Department of Justice's CHIP units. How effective has this partnership been? What has been done to ensure that the new agents are effectively supporting CHIP investigations?

Response:

The FBI's IP agents have been strategically assigned. While some of these agents have been assigned to the IPR Center, as discussed above, most are aligned with the Department of Justice (DOJ) Computer Hacking and Intellectual Property (CHIP) program. The CHIP program consists of over 200 Assistant United States Attorneys (AUSAs) specially trained to prosecute cyber crime and intellectual property cases. These AUSAs work closely with DOJ's Computer Crime and Intellectual Property Section (CCIPS), which has primary responsibility for developing DOJ's computer and intellectual property offense enforcement strategies, providing programmatic support to the CHIP network, and coordinating computer crime and intellectual property investigations and cases that may significantly impact more than one district and/or other countries.

In 2010, 20 FBI agents joined the 31 agents who were then devoted to investigating IP crimes, bringing the number of dedicated IP agents to 51. The 20 newly assigned agents are deployed to locations around the country where IP crimes are of particular concern, working with both CHIP AUSAs and CCIPS to help coordinate complex investigations, develop investigation and prosecution strategies, and coordinate multi-district cases. We believe these agents have significantly strengthened the FBI's ability to investigate IPR violations through their partnership with CHIP AUSAs and their close coordination with our state and local law enforcement partners and our international counterparts.

10. What types of IP investigations are these agents' highest priorities, and what are their criteria for deciding which investigations to pursue?

Response:

The highest priorities for the IP agents supporting CHIP AUSAs are the same as the highest priorities for IP agents, generally: IP crimes that pose immediate threats to health and safety, have a national security nexus, involve organized crime, or may exert significant economic impact. Even within these top priorities, though, the determinations of which investigations to pursue, what resources to allocate, and what priority to assign depend upon the unique facts of each case, and these facts can change during the course of an investigation. For example, while immediate threats to health and safety clearly receive a very high priority, those threats may only become evident, or may be refuted, during the course of a broader IP investigation, raising or lowering the priority of that investigation as the investigation evolves. In cases of monetary loss, factors affecting an investigation's priority might include the amount of the loss and the degree to which other remedies are available to the victim rights holder.

Questions Posed by Senator Coburn

11. According to your 2009 and 2010 Annual Reports required by the PRO-IP Act, the FBI has used funding authorized by that Act to hire 51 new agents to work on IP enforcement-related cases. According to the PRO-IP Act, these agents are supposed to be used for the investigation and coordination of intellectual property crimes. Do any of those agents spend time NOT working on IP cases? Why?

Response:

As noted above, the PRO-IP Act has enabled the FBI to dedicate approximately 51 Special Agents to IPR, with 20 additional agents joining the 31 agents already devoted to IP crimes in 2010. The appropriations included in the PRO-IP Act have enabled the FBI to place IP-dedicated Special Agents at the IPR Center and in 21 of the FBI's 56 field offices. In fact, by using funds provided by the PRO-IP Act along with other appropriations, we have been able to increase the amount of time Special Agents dedicate to the investigation of IP crime so that these resources now exceed the 51 Special Agents called for in the PRO-IP Act.

In addition to investigating IPR crimes, Special Agents dedicated to IPR develop and implement strategic investigative initiatives and work with local law enforcement authorities and industry partners in support of IP investigations. They also attend and provide IPR training and continue their career-path training. Although these IP agents occasionally support other high-priority matters in their field offices, this other activity is more than offset by the resources provided outside the PRO-IP Act and used to work IP cases in the 35 FBI field offices for which no PRO-IP Act agents were allocated. These resources are also supplemented by those used to investigate economic espionage violations under 18 U.S.C. § 1831; these violations are assigned to national security units, which are resourced separately from, and in addition to, the approximately 51 agents working other IPR violations.

12. In 2009, FBI received $9.4 million to hire 31 agents. $8 million was for salaries for 31 agents and 15 support personnel, and $1.4 million was for other funding, which included $331,000 for travel and training of the new agents. The salary expenses are an average of approximately $174,000 in salary per person (agents and support personnel) and $10,677 in travel expenses per agent.

a. Is $174,000 the average salary for support personnel and/or an agent? If not, what is average salary for FBI support personnel? What is the average salary for an FBI agent?

Response:

In Fiscal Year (FY) 2011, the average annual compensation (including salary, benefits, locality pay, and, for Special Agents, availability pay) for an FBI Special Agent is $171,000 and for a professional support employee is $89,000. The FBI does not, though, use average compensation when requesting new positions. Instead, we use a cost module for new positions that was developed in collaboration with DOJ and the Office of Management and Budget and that includes compensation and other costs associated with hiring and supporting new employees (this includes, for example, the costs of the background investigations of these new employees and of their initial supplies, including computers).

Following are the costs used in the FY 2009 IPR enhancement referenced in the question.

Type of Position	Number of Positions	FY 2009 Cost Module Funding Per Position*	Total Personnel Cost
Special Agent	31	$215,000	$6,665,000
Clerical	9	$70,000	$630,000
Investigative Support	6	$113,000	$678,000
TOTAL	**46**		**$7,973,000**

*Note: The "Cost Module Funding Per Position" includes half of the first year's compensation and the non-personnel costs (developed in the cost module) required to hire a new employee.

b. Why was $10,000 spent on each agent for travel? Does this amount include conferences? If so, please break down the 2009 and 2010 travel expenses to show use of the funds.

Response:

As reported by the FBI in the 2009 PRO-IP Act Annual Report to Congress, the FBI received $8 million to support the IPR program for FY 2009. Personnel funding of $6.580 million enabled us to place 26 specially trained Agents in the field and 5 Agents in the FBI Headquarters (FBIHQ) IPR Unit located at the IPR Center. Non-personnel funding, in the amount of $1.420 million, included $1.009 million to be used for equipment and supplies in the field and equipment and construction costs for the FBIHQ IPR Unit. The remaining amount of $331,000 was used to fund the following.

- Approximately $60,000 funded training and travel for personnel assigned to DOJ's CCIPS.

- Approximately $62,000 funded training and travel costs for FBI Agents, including newly designated IPR Agents, and Intelligence Analysts who work IPR matters, including their attendance at a comprehensive 3-day IPR training conference in California.

- Approximately $209,000 funded domestic and international IPR operational travel and training costs, including the attendance of more than 20 FBI employees at the 2009 INTERPOL International Law Enforcement IP Crime Conference in Dublin, Ireland. This conference, which is focused solely on operational activities, brings law enforcement organizations, regulatory agencies, private sector IP crime investigators, and prosecutors together to develop practical operational responses to IP crimes. The FBI both contributes to this conference and benefits from attending it. We contribute by providing all translation services, making a targeted address to the conference as a whole, and leading several breakout sessions. We benefit because the conference allows us to: develop new relationships and enhance existing relationships with the law enforcement agencies of other countries responsible for responding to IPR issues; share trends and intelligence in regional and global IP crime; facilitate case referrals and lead generation and response; share best practices in IP enforcement efforts; and develop protocols for joint/cooperative responses to global IPR matters. Although we can discuss them only in a classified setting, our attendance has directly resulted in investigative leads, case referrals, and international assistance in IPR investigations, and INTERPOL has recently moved to adopt a Theft of Trade Secrets program.

13. How did the FBI decide where to place the 51 additional agents it has hired over the past two years? Have those agents made an impact on the number of cases opened, investigated and concluded? Why or why not?

Response:

As noted above, in 2010 20 FBI agents joined the 31 agents who were then devoted to investigating IP crimes, bringing the number of dedicated IP agents to 51. In FY 2010 the FBI conducted an extensive strategic review of the IPR program, including the threat information provided by our partners in industry associations, international and domestic law enforcement organizations, and the intelligence community. In addition, the FBI analyzed its pending cases to determine whether the most significant threats were being addressed. Based upon that review and analysis, dedicated IP agents were assigned to 22 of DOJ's 25 CHIP units and FBI IP Coordinators were assigned to the remaining three units.

While this placement of IP agents has increased the number of newly initiated cases (particularly the numbers of trade secret investigations and health and safety investigations), we believe the more significant impact has been the increase in the significance, complexity, and scope of the IP cases we are able to investigate successfully. The addition of IP agents and their placement with CHIP units have improved our ability to address the increasingly complex IP threat, which includes both domestic and international elements.

<u>(The following questions were posed to all witnesses - the FBI is responding solely for the FBI)</u>

14. Could you each explain briefly your responsibilities in IP enforcement and how you coordinate with one another?

<u>Response</u>:

Because of the FBI's dual responsibilities in intelligence and law enforcement, we are ideally positioned to examine the organizations and individuals involved in IP theft. The FBI's strategic objective is to disrupt and dismantle international and domestic manufacturers, distributors, and criminal organizations engaged in IP crimes, focusing in particular on the thefts of trade secrets and the sales of counterfeit goods that threaten health and safety and on copyright and trademark infringements that involve national security, organized crime, or significant economic interests.

As discussed further below, the IPR Center is critical to the effective coordination of these complex investigations. While investigators at the FBI and other agencies coordinate directly with DOJ prosecutors in individual cases, and planning and consultation between agencies can efficiently address short-term or narrow-scope issues, strategic and policy coordination and deconfliction benefit from the ongoing interaction among the agencies participating in the IPR Center.

15. How effective has the IPR Center been at coordinating agency efforts and de-conflicting cases to ensure no duplication occurs?

Response:

The IPR Center has become an invaluable tool for coordinating large initiatives, collaborating on pending matters, and reducing the risk that simultaneous or overlapping investigations will jeopardize the work of one of the investigating agencies. During weekly meetings managed by U.S. Immigration and Customs Enforcement, partner agencies discuss recently initiated investigations and are tasked with querying their databases to identify any investigative overlap. This coordination ensures the effective use of limited resources, allows for the deconfliction of incoming leads, and presents opportunities to initiate joint agency investigations. In addition, the IPR Center's Intelligence Fusion Group allows the FBI and its partner agencies to obtain a clear picture of the IPR threat, share strategic intelligence, establish joint collection requirements, and produce joint intelligence products.

16. How does each of your agencies coordinate with private industry to improve your enforcement efforts?

Response:

The FBI and our IPR Center partners use executive meetings, awareness programs, conference participation, and targeted training opportunities to coordinate with private industry to improve IPR enforcement. In our efforts to develop and maintain close working relationships with domestic and international industry partners, the FBI focuses, in particular, on "subject matter expert" learning exchanges, investigative referrals, and joint case initiatives. For example, in Los Angeles the inclusion of private sector brand (or rights) holders, subject matter experts, prosecutors, and law enforcement agencies in an Intellectual Property Loss Mitigation Working Group has made this an excellent forum for the exchange of information. The FBI has also hosted a small working group of corporate security officers from Fortune 100 companies with a view toward improving the sharing of IP theft information and strengthening relationships between law enforcement agencies and industry. When IPR Center researchers were recently preparing a comprehensive threat report, industry partners collaborated in the effort, providing valuable insight into the IP threats facing various industries, including the automotive, aircraft, media content (software, music, and movies), luxury goods, and pharmaceutical industries.

17. How has the private industry stepped up their efforts to enforce their rights and coordinate with the federal government?

Response:

The FBI and our IPR Center partners meet frequently with industry representatives to share information regarding the IP threat. Training programs conducted by DOJ and the State Department for foreign industry representatives often include a full day on which industry representatives discuss the identification of counterfeits and develop effective working relationships with law enforcement agencies. As a result of the IPR Center's domestic and international training and outreach, a number of key industries are building critical awareness of piracy and counterfeiting issues.

To successfully investigate IP crimes, the FBI and partner agencies often rely on referrals from the victims of infringement and work closely with industry experts to distinguish counterfeit and pirated goods from legitimate items. Increasingly, industry officials are proactively stepping forward to collaborate with the FBI regarding data protection and the theft of trade secrets.

18. How much does each of your agencies spend annually on IP enforcement? Has that increased since the passage of the PRO-IP Act in 2008?

Response:

The FBI has increased the resources dedicated to IPR since the 2008 passage of the PRO-IP Act. Prior to FY 2009, the FBI did not have a dedicated IPR budget, instead supporting its IPR activities with base funds. The appropriation of IPR-specific resources in both FY 2009 and FY 2010 provided dedicated personnel and non-personnel IPR resources. The FBI spent approximately $7.5 million in FY 2009 and approximately $14.4 million in FY 2010 on IPR maters. In FY 2011, the FBI anticipates spending approximately $14.1 million on IPR efforts. FY 2010 funding is greater than FY 2011 funding because FY 2010 funding includes the first-year cost module funding necessary to establish the newly authorized positions (including background checks and supplies, such as computers), and this funding is not necessary in full after the first year.

19. Has the amount and/or quality of agency coordination improved since the formation of the Office of the IP Enforcement Coordinator in 2009? Why or why not?

Response:

Several areas of inter-agency coordination have improved since the formation of the Office of the IP Enforcement Coordinator (IPEC), including joint investigations and strategic planning, coordination with international partners, and the effectiveness of working groups. For example, the Office of the IPEC spearheaded inter-agency efforts to address the online sale of counterfeit pharmaceuticals and the presence of counterfeits in the government supply chain, coordinated the development of legislative proposals on behalf of the Administration with input from all affected agencies, and assisted in coordinating training and capacity building programs to increase awareness and minimize duplication of these programs.

20. Are there certain products or offenses that dominate your enforcement efforts?

Response:

The FBI's IP-related strategic objective is to identify and dismantle international and domestic manufacturers, distributors, and criminal organizations engaged in IP crimes, focusing on those thefts of trade secrets and distributions of counterfeit goods that pose a threat to health or safety and those copyright and trademark infringement cases with a national security, organized crime, or significant economic impact.

The following types of cases have necessitated increased law enforcement efforts:

Complex Thefts of Trade Secrets. Technological advancements have greatly affected both the significance of trade secret violations and the complexity of the related investigations. The types of trade secret cases being investigated when the Economic Espionage Act was passed in 1996 are now rare. In the past, an employee simply copied a sales list or a set of blueprints and attempted to sell it to a competitor. Investigators often located the physical evidence of these crimes and, on occasion, the FBI was alerted by the competitor and was able to catch the perpetrator in the act by setting up an undercover purchase. These efforts often resulted in irrefutable evidence that frequently led to guilty pleas. Now, an insider downloads gigabytes of information from the computer of a victim rights holder and transmits it instantaneously to a competitor or hostile entity. In these cases, it is very difficult to locate evidence and to prove some elements of the crime, such as intent. The average time spent on such investigations has increased substantially.

Counterfeit Pharmaceuticals and Other Goods that Threaten Health and Safety. The counterfeit arena is no longer dominated only by luxury goods and clothing, nor is it confined to the "secondary market," in which consumers seek out and deliberately purchase less expensive copies of name brand items. A growing concern is the trend toward potentially dangerous "primary market" counterfeits, including aircraft and auto parts, electrical components and appliances, and pharmaceuticals. Substandard product knock-offs may find their way into the legitimate supply chain and are often purchased in the belief that they are genuine, posing a significant risk to safety and health. For example, counterfeit pharmaceuticals may contain harmful substances, excessive amounts of active ingredients, little or no active ingredient, or even substitute types of active ingredients used in other pharmaceuticals, all of which may be dangerous to the consumer.

Copyright Infringement Committed Online. Online piracy dominates copyright infringement, whether through peer-to-peer (P2P) file-sharing, web sites offering downloadable pirated content, or online stores and auction sites where pirated movies and software can be purchased on disc. These methods have overtaken traditional avenues of copyright infringement, including the sale of pirated compact disks, DVDs, software, and books through storefronts and flea markets. Though the piracy of discs and other media is still widespread, online piracy accounts for an increasing proportion of the copyright infringement activity and its enforcement will be reflected in a larger proportion of our investigative efforts.

Streaming. A more recent development in online copyright piracy is the growth in the "streaming" of pirated audio and video content, which can be accomplished without downloading a complete copy. In the past, the costs of the bandwidth and the equipment necessary to stream content, particularly video content, have discouraged this abuse. Decreasing costs, the deployment of broadband to consumers, and the ability of providers to recoup costs through online advertising networks have made streaming a viable option for a growing number of content providers, both legitimate and illegitimate. A number of large-scale pirate sites now deliver infringing content through streaming, often from overseas to avoid U.S. enforcement efforts, and many bring in millions of dollars in subscription fees and advertising revenue for their owners, while providing no compensation to the owners of the pirated content.

21. Are there certain countries that pose more serious threats to American intellectual property than others?

__Response__:

The threat to our intellectual property is diverse in nature and global in reach. Although no one country stands along as the cause of intellectual property crime, China is a significant source of both counterfeit and pirated products imported into the United States and the theft of trade secrets. For example, of the eight indictments under the economic espionage statute (18 U.S.C. § 1831) since it was passed in 1996, six had a nexus to China.

22. Why kind of discussions have you been having with China?

__Response__:

The FBI's Legal Attaché in Beijing routinely engages with Chinese officials on a variety of investigative matters, including IP-related investigations. Recognizing the significance of the IP threat in China, the FBI conducted a threat assessment and sent an agent and an analyst to China to meet with local government and industry representatives. The information obtained through these activities was a factor in the decision to deploy a dedicated IP agent to Beijing to work closely with Chinese law enforcement officials on IP matters of joint interest.

23. From the reports submitted by the IPEC, DOJ and FBI, it appears a majority of the cases involve Chinese products seized and/or Chinese defendants. Do you feel there has been a corresponding decrease in cases involving China since the meetings between American and Chinese officials took place last fall? Why?

__Response__:

Statistics that would demonstrate a recent decline or increase in cases involving China are not readily available at this time. However, informal observation indicates that the number of investigations may be fairly constant. While the meetings may have resulted in greater Chinese enforcement efforts and fewer violations, we may be pursuing a greater portion of these violations as a direct consequence of the greater investigative resources devoted to IPR infringements. In addition, or in the alternative, continued growth in the Chinese economy, both legitimate and illegitimate, may be negating any enforcement progress made by China since last fall's meetings.

24. What else needs to be done to decrease the infringement threat from China?

Response:

Continuing to engage our Chinese law enforcement counterparts and strengthening those relationships are critical to decreasing the IPR infringement threat posed by China. This engagement, which should include information sharing and joint criminal enforcement operations, will be enhanced when the FBI's dedicated IP agent arrives in Beijing later this year. Joint training opportunities that include both U.S. and Chinese law enforcement officers should also be aggressively pursued, and innovative ideas, such as a Chinese-based IPR enforcement academy, should be thoroughly evaluated.