## **INTRODUCTION**

On October 12-13, 2000, the United States Sentencing Commission held a national symposium on Federal Sentencing Policy for Economic Crimes and New Technology Offenses in Arlington, Virginia. This symposium, the third in the Commission's series on "Crime and Punishment in America," was hosted by the George Mason University School of Law, and attended by over 200 persons. The symposium was co-sponsored by the Committee on Criminal Law of the Judicial Conference of the United States, the American Bar Association White Collar Crime Committee, and the National White Collar Crime Center. Co-chairs of the symposium were Sentencing Commission Vice Chair John R. Steer, and Commissioner Michael E. O'Neill, a law professor at George Mason University.

The Commission's first symposium – "Drugs & Violence in America" – was held in June 1993, gathering together more than 350 people to discuss various policy options for stemming the tide of drug abuse and associated violence. The second symposium – "Corporate Crime in America: Strengthening the 'Good Citizen' Corporation" – was held in September 1995 and involved more than 450 persons discussing the effects of the federal sentencing guidelines on corporate behavior.

Like its predecessors, this symposium continued the tradition of bringing together leaders from the federal judiciary, law enforcement, the legal community, academia, and industry to discuss cutting-edge legal issues and to exchange innovative ideas regarding current federal sentencing policy. The purposes of this symposium were two-fold: first, to discuss sentencing policy for economic crimes generally; and second, to discuss the impact of new technology on investigating, prosecuting, and sentencing economic crimes. In keeping with the topic for this symposium, moreover, the proceedings were experienced not merely by the on-site participants, but with the assistance of the world-wide web, potentially thousands of others. The proceedings were webcasted live over the Internet and have been archived for viewing at the Sentencing Commission's website (*http://www.ussc.gov*).

The symposium opened with welcoming remarks made by Commissioner O'Neill, who set the tone for the day by stating that the incredible technological innovations of new technology companies demand that we reassess the application of criminal law and, in particular, federal sentencing, to the world of cyberspace. Following Commissioner O'Neill, Vice Chair Steer noted that the purpose of the symposium was, in part, to assist the Commission in rethinking how to best punish and formulate an effective and just sentencing policy for economic crimes. In this regard, Vice Chair Steer asked the attendees to think broadly and creatively about punishment for economic offenses when suggesting factors that should be considered in determining the type and amount of punishment for offenses involving economic crimes and new technology offenses.

Vice Chair Ruben Castillo, a judge of the United States District Court for the Northern District of Illinois, then introduced the symposium's keynote speaker, Deputy Attorney General Eric H. Holder, Jr. Mr. Holder first noted the high priority the Department of Justice has placed on the prosecution of white collar crime and cybercrime, as these forms of crime adversely affect a large segment of society, particularly the elderly and other vulnerable persons. According to Mr. Holder, the technological advances of the late 20th century have had a dramatic impact on society, not the least of which has been the facilitation of white collar crime through the use of new technologies. Citing the Internet as an example, Mr. Holder noted that it has placed instantaneous access to information and communication a mere keystroke away. As a result, there are vast opportunities not only for law abiding citizens, but also for criminals, who now can commit crimes with minimal effort but with broad impact. Crimes of that magnitude, according to Mr. Holder, not

only may harm masses of victims, but may interfere with the economic vitality of a nation merely by creating a common fear that any commercial transaction over the Internet is vulnerable to victimization.

The first plenary session exemplified the Commission's efforts to include academia in the dialogue regarding sentencing policy issues for economic crime and new technology offenses. Entitled "What Social Science Can Contribute to Sentencing Policy for Economic Crimes," Plenary Session I drew upon the diverse backgrounds of social science, economics, and research on public attitudes toward white collar crime. Professor Jeffrey S. Parker of the George Mason University School of Law moderated this session, and presentations were made by Professor Daniel Nagin of Carnegie Mellon University, Professor Mark Cohen of Vanderbilt University, and Dr. Donald J. Rebovich of the National White Collar Crime Center.

Professor Nagin discussed evidence regarding the efficacy of deterrence-oriented sentencing models, including models that involved informal sanctions, (*e.g.*, shame punishments). Dr. Rebovich followed, reporting on studies the National White Collar Crime Center had sponsored regarding the public's perception of economic and high-tech crimes. Finally, Professor Cohen discussed the implications of economic theories of crime control for the federal sentencing guidelines.

Plenary Session II provided a brief overview of a proposed "Economic Crime Package" that would change the sentencing guidelines for fraud and theft offenses. Dr. Courtney Semisch, senior research associate at the Sentencing Commission, and Andy Purdy, acting general counsel for the Sentencing Commission, discussed the reasoning behind the package and the effect such changes would have on the sentencing of fraud and theft offenses.

Plenary Session III, "The Nature and Severity of Punishment for Economic Crimes: Determinants of Offense Seriousness and Offender Culpability," was moderated by Judge Joe Kendall of the United States District Court for the Northern District of Texas. With him on the panel were Judge J. Phil Gilbert, chief judge of the United States District Court for the Southern District of Illinois; James K. Robinson, Assistant Attorney General for the Criminal Division, United States Department of Justice; James E. Felman with Kynes, Markman & Felman, P.A., in Tampa, Florida; and Dr. Mark Cohen of Vanderbilt University. The panel explored possible answers to three questions posed by Judge Kendall regarding the basic assumptions behind sentencing for economic crimes: (1) "Is loss the best proxy to establish an appropriate sentence in a theft or fraud case ?"; (2) "If there is a current problem with the guidelines that is in need of repair, is it that fraud and theft are punished too leniently or that drug crimes are punished too harshly?"; and (3) "In fraud and theft offenses, should there be alternatives to incarceration? If so, what should they be? What factors or offender characteristics would cause one to be included or excluded as a candidate for an alternative punishment?"

After breaking for lunch, the symposium split into seven breakout groups to discuss issues related to the definition of loss for most economic offenses. The first and second groups discussed whether the core definition of "loss" should be based on principles of causation. Group One was led by Professor Frank O. Bowman, III, of the Indiana University School of Law. With Professor Bowman were Assistant United States Attorney Judy Goldstein Smith of the Eastern District of Pennsylvania and Justin A. Thornton, a white collar criminal defense attorney based in Washington, D.C., and member of the Commission's Practitioners Advisory Group. The panelists' discussion for Group One focused on whether interest should be included in loss, and whether, even if reasonably foreseeable, the costs of investigation and prosecution should be excluded from loss. In contrast, Group Two focused on the problems posed if losses are caused by multiple factors. Like Group One, Group Two discussed how, if at all, intervening causes should be

addressed when determining loss. Group Two was led by John D. Cline of Freedman Boyd Daniels Hollander Goldberg & Cline, P.A. in Albuquerque, New Mexico, and Vicki Portney, of the Department of Justice Criminal Division's Office of Policy and Legislation.

Groups Three, Four and Five all tackled the issue of whether loss should be based upon gross proceeds, or a net amount. With respect to loss being determined using a net approach, each group also discussed what credits or exclusions should be used in determining net loss. Group Three was led by Joshua R. Hochberg, chief of the Fraud Section of the Criminal Division of the Department of Justice. With him were James E. Felman and Gregory T. Wallance of Kaye, Scholer, Fierman, Hays & Handler, LLP (New York City), both of whom are members of the Practitioners Advisory Group, Group Three focused on crediting problems particular to regulatory offenses, as exemplified by those fraudulent schemes where a defendant has falsely represented that a product was approved for distribution by a regulatory agency. Group Four was led by T. Mark Flanagan, Jr. of McKenna & Cuneo, LLP, Washington, D.C. With him were Professor Michael Goldsmith of Brigham Young University School of Law, a former vice chair of the Sentencing Commission, and Jonathan Rusch, special counsel for Fraud Prevention in the Fraud Section of the Criminal Division of the Department of Justice. Group Four focused on crediting problems associated with investment schemes such as "Ponzi" schemes. Group Five discussed the problem timing plays in formulating a definition for loss. For example, how should the property involved in a fraud, or the fraudulently obtained property returned to the victim, be valued at the time of the original fraud, at sentencing, or at some other time? Group Five was led by Miriam A. Krinsky, an assistant United States attorney and chief of criminal appeals for the Central District of California, with L. Barrett Boss of Asbill, Junkin, Moffitt & Boss, Chtd. in Washington, D.C., and Catharine M. Goodwin, assistant general counsel for the Administrative Office of the United States Courts, as co-facilitators.

Finally, Groups Six and Seven discussed how loss should be defined in cases of inchoate or partially completed offenses. Judge Julie E. Carnes of the United States District Court for the Northern District of Georgia, a former sentencing commissioner, was the lead facilitator for Group Six, and was joined on that panel by Thomas L. Hutchison of the Federal Defenders Training Group and Jonathan J. Wroblewski, acting director of the Office of Policy and Legislation in the Criminal Division of the Department of Justice. Group Six focused first on the issue of whether intended loss should be discounted inasmuch as it was never a real loss, and second on whether intended loss should be factored into the overall determination of loss. In contrast, Group Seven asked whether intended loss should be used as a measurement of loss. Group Seven was led by David F. Axelrod of Vorys, Sater, Seymour and Pease, LLP, in Columbus, Ohio, and was co-facilitated by Thomas E. Zeno, executive assistant United States attorney in Washington, D.C., and Marc Zwillinger of Kirkland and Ellis in Washington, D.C.

After the breakout sessions, the symposium participants moved to the Arlington Hilton and Towers, in Arlington, Virginia, for a reception and dinner. Norman R. Augustine, chairman of the Executive Committee for Lockheed Martin, delivered the keynote dinner address. Dr. Augustine noted the important role the Commission is playing during this critical time for the evolution of technology and the law and provided a particularly informative, as well as entertaining, discourse on the incredibly fast-paced change that technology currently is undergoing.

Putting technological change in historical perspective, Dr. Augustine noted that after the invention of agriculture, it still took 4,000 years for hunting and gathering to be supplanted; 5,000 years for cities to emerge; 6,000 years for writing to develop; and 7,000 years for the invention of mathematics. In stark

contrast to the glacial pace of the earliest technological developments, it took only 66 years to go from the first manned airplane flight to landing on the moon. According to Dr. Augustine's calculations, the Wright Brothers' entire flight, if it happened today, easily could take place inside the main external fuel tank for the space shuttle.

With respect to advancements in computer technology, Dr. Augustine provided a number of impressive and thought-provoking anecdotes. Approximately every 30 months an entire generation of computer chips is supplanted—a rate that has been continuing for more than a quarter of a century. At the same time, the cost of circuitry in computer chips has been decreasing by a factor of one-half approximately every 13 months. In light of such incredibly beneficial economies of scale, Dr. Augustine noted that IBM recently announced plans for a new super-computer that will be 500 times more powerful than the world's fastest computer at present and will be capable of performing one quadrillion operations per second, which is more than two million times more powerful than today's desktops and one thousand times more powerful than "Deep Blue," the computer that soundly defeated Gary Kasparov at chess. Nicknamed "Blue Gene," this new über-computer will be dedicated to genetic research.

In light of computer technology's hyper-evolution, both the Internet and world-wide web correspondingly have evolved at incredible paces. According to Dr. Augustine, in 1993 there were only 130 websites on the Internet. In contrast, today there are more than ten million individual websites crowding cyberspace with billions of webpages. But, as Dr. Augustine also noted soberly, referring to last year's distributed denial of service attacks, technology has made it possible for a single, 15-year-old boy to disrupt business and communications halfway around the globe, with financial consequences literally on a global scale.

The second day of the symposium began at 8:30 a.m. with Judge Sterling Johnson, Jr., a judge for the United District Court for the Eastern District of New York and commissioner for the United States Sentencing Commission, delivering the introduction for the morning's keynote speaker. Louis J. Freeh, Jr., director of the Federal Bureau of Investigation, originally was scheduled to give the keynote address, but due to overseas terrorist attacks on the U.S. military, Director Freeh was unable to attend. In Director Freeh's stead, Michael Vatis, director of the National Infrastructure Protection Program, an interagency program designed to investigate and detect cyber-attacks on our nation's infrastructure, provided the day's keynote address. Director Vatis discussed the growing global threat of cybercrime, but noted that the threat of cybercrime comes not only from international terrorist groups or foreign counterintelligence operations, but increasingly from organized crime.

Plenary Session V focused on "Background on New Technology Offenses." Jason Thomas, manager of the National Fraud Complaint Management Center/Internet Fraud Complaint Center for the National White Collar Crime Center, reported on the scope of Internet-related criminal activity. Richard Power, the editorial director for the Computer Security Institute, followed up with a report regarding an annual national survey of new technology offenses that was recently commission by the Computer Security Institute in cooperation with the Federal Bureau of Investigation's Computer Intrusion Squad.

Plenary Session VI was led by David Goldstone, leader of the Intellectual Property Rights Team for the Computer Crimes and Intellectual Property Section of the Criminal Division of the Department of Justice. Mr. Goldstone provided an overview of how the guidelines apply to the sentencing of new technology offenses.

## Symposium on Federal Sentencing Policy for Economic Crimes and New Technology Offenses

Commissioner Michael E. O'Neill led Plenary Session VII that was entitled "Understanding New Technology Offenses." On the panel were Scott Charney of PriceWaterhouseCoopers; Mark Rasch, vice president of Global Integrity; Howard Schmidt, corporate security officer for Microsoft Corporation; and Martha Stansell-Gamm, chief of the Computer Crimes and Intellectual Property Section. The panel focused on the nature of new technologies, such as encryption and viruses, and the impact these technologies have on the investigation, prosecution, and sentencing of criminal offenses. The panelists also explored the sentencing policy implications for these offenses.

The symposium then broke into five concurrent breakout sessions during a working lunch. Group One—"Hacking/Viruses/Interrupted Computer Service Intrusions/Privacy"—focused on specific new technology offenses. Group One was led by Elizabeth Banker, corporate counsel for Yahoo!, Inc. With Ms. Banker on the panel were James Dempsey, senior staff counsel for the Center for Democracy and Technology; Martha Stansell-Gamm, chief of the Computer Crimes and Intellectual Property Section; and John Tritak, director of the federal government's Critical Infrastructure Assurance Office. Group Two discussed the intellectual property and copyright infringement issues surrounding new technology that recently had been highlighted by the litigation brought by the Recording Industry of America against Napster, Inc. Group Two was moderated by Ken Cohen, director of legislative affairs for the U.S. Sentencing Commission. With him were Peter Nolan, senior vice president and assistant general counsel for The Walt Disney Company; David Goldstone, leader of the Intellectual Property Rights Team for the Computer Crimes and Intellectual Property Section; Tom Costabile, senior vice president of operations for Sony Disc Manufacturing, Sony Music; and Monty Price, assistant director of the Cybersmuggling Center, U.S. Customs Service.

Group Three focused on economic espionage, which often occurs when one company uses new technology to spy on a rival company. This panel was moderated by David Green, principal deputy chief for the Computer Crimes and Intellectual Property Section. With him were Joseph F. Savage, Jr. of Testa, Hurwitz & Thibeault, L.L.P., Boston, Massachusetts; and Carla Mulhern, vice president for the Analysis Group of Economics in Washington, D.C. Group Four was concerned with "Consumer Fraud via the Internet," and was moderated by Rob Chesnut, associate general counsel for eBay. Group Five focused on the rampant growth of securities fraud that the Internet has facilitated. Group Five was moderated by John Reed Stark, chief of Internet fraud for the U.S. Securities and Exchange Commission. Cam Funkhouser, vice president of NASDR, and Robert Khuzami, chief of the Securities Fraud Group for the U.S. Attorney's Office for the Southern District of New York, served as panel members.

After a brief recess, the symposium reconvened for Plenary Session VIII: "Sentencing Implications of New Technology Offenses." Judge William K. Sessions, III, judge for the U.S. District Court for the District of Vermont and vice chair for the U.S. Sentencing Commission, moderated the plenary session, which heard reports from each of the moderators of the five breakout sessions.

Judge Diana E. Murphy, chair of the Sentencing Commission and judge for the United States Circuit Court of Appeals for the Eighth Circuit, delivered concluding remarks and adjourned the symposium. Judge Murphy, who had been in attendance at a Senate hearing regarding the Commission earlier that day, reported on the interest the Senate had in the work the Commission was doing with respect to economic crimes. Judge Murphy reiterated the important role the discussions and suggestions made at the symposium would play as the Commission continues to confront the difficult sentencing issues posed by economic crimes and new technology offenses.

## U.S. Sentencing Commission

The Commission will continue to monitor sentencing practices for economic offenders, in general, and cases involving new technology offenses, in particular. Pursuant to its statutory mandate, the Commission will use the information it obtains to amend the guidelines as warranted. Likewise, the Commission will communicate with the private sector, business and law schools, and other interested parties to promote a more informed approach toward sentencing economic offenders in this new technology era. As always, the Commission will work with law enforcement on issues concerning consistent and effective enforcement policies for new technology offenses.