Testimony of Peter E. Sand
Chief Information Officer and Chief Deputy Attorney General
Internet Gambling: Technical Background

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Opening Remarks and Brief Explanation of Presentation

Good afternoon Chairman Gannon and members of the House Judiciary Committee. Thank you for this opportunity to present a technical background of Internet Gambling as a primer for the further discussions today.

My name is Peter Sand. I am the Chief Information Officer of the Office of Attorney General Mike Fisher. I am also a Chief Deputy Attorney General and I manage the Information Technology and Law Section of the Office.

Newly created under the leadership of General Fisher, the Information Technology and Law Section oversees the strategy, implementation and maintenance of technology throughout the Office. In addition to technical work, the Information Technology and Law Section assists the Office in understanding emerging Internet Legal Issues as well as guiding the Office's Law Enforcement efforts to combat illegal activity which is taking place on the Internet.

Under the direction of Mike Fisher, the Information Technology and Law Section has taken a leadership role with the National Association of Attorneys General, regarding both Internet technical and Internet legal work. In addition, the Information Technology and Law Section offers guidance to other Law Enforcement Agencies across the Commonwealth regarding these same issues.

My remarks today are limited to the underlying Internet technology and do not address any legal issues.

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In an effort to illustrate the technology at issue, I would like to submit my written testimony to the Committee and spend my allotted time demonstrating the Internet gambling environment. I have asked Ms. Szukalski to assist with the mechanics of the presentation.

Mr. Chairman, with your permission, I would like to begin the presentation portion of my testimony.

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Internet Basics

The Internet is irrelevant.

The Internet can be described from many different perspectives and as being many different things. For purposes of this discussion, the most helpful perspective presents the Internet as nothing more than an extension to the traditional world as we know it. In other words, one would ignore the hype and mass media spectacle of "the Internet" and focus on the activities being conducted. Electronic mail would become nothing more than a new way to communicate via a written medium (email = mail). The World Wide Web would be a new method of presenting information with words and pictures (the web = magazines and/or television).

The above perspective is helpful for purposes of discussing the subject of Internet gambling because it allows us to understand the nature of the activities at issue. Illegal activity is still illegal regardless of the level of technology used to facilitate the illegal act. The fact that a wrongdoer communicates with his victim via email rather than traditional US Postal mail is not relevant to the issue of whether there was a communication.

At the risk of being crass, one could argue that technology is not relevant to the issue of Internet Gambling. One would examine the targeted Internet activity, ignore the technology being utilized and ask whether the same activity would be illegal if it had occurred within a traditional (low-tech) environment (traditional mail vs. email).

The above perspective is helpful to begin a discussion, however there are complications.

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In fact the technology brought to bear in a given activity can change the nature of the activity to some extent. In order to better understand how the technology does change the nature of the activity at issue, other methods of understanding the Internet become relevant.

The Internet is a network of networks.

Another way of perceiving the Internet is as a large collection of networks. The Internet is a series of communication pathways, very similar to the series of highways we drive on everyday. From this perspective, the Internet is in fact the "Information Superhighway."

The "backbone" of the Internet is a large "superhighway" that crosses the country (and the world) and carries large amounts of traffic at great speeds. Given the nature of superhighways, this backbone does not meet the local driveways of individual Internet users. There are "off ramps" from the superhighway to smaller highways, which eventually lead to local road, side streets and personal driveways.

This approach to understanding the Internet begins to trigger some the complexities of today's high technology business environment.

Depending on how expansive the resources of a given Internet gambling enterprise, that enterprise will be closer or further away from the Internet backbone. The further the enterprise is from the backbone, the more intermediary businesses become involved. As more intermediaries become involved, the structure of a given Internet gambling enterprise becomes more complex.

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The Internet is a market for unbundling product features.

This third way of describing the Internet is helpful in terms of understanding the nature of the business environment at work in a given Internet endeavor.

The nature of the information technology at work in almost all Internet-related business enterprises allows for the decentralization of effort. An example of this is a standard book one would obtain from a book store or library.

As a general matter, in the traditional environment (ignoring the Internet for a moment), a book is produced by one entity. The pages are printed, the cover is attached, the table of contents and index are created and included as well as page numbers, font choice and artwork. While this may be a simplification of the real process, when compared to the unbundled nature of the Internet equivalent, the traditional book is a single, unified object that is delivered from a single, identified source, the seller, to a single, identified audience, the reader.

In the Internet environment, any product feature that can be separated from the other features is broken off and operates independently from the other features. The reader as opposed to the seller is the unifying force that brings all of the separated product features together into one object.

To be more specific, through current technology,

- One person can create the content;
- Another person can create a table of contents for that content;
- A separate person can create an index to the original contents;
- A separate person can create artwork;

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- A separate person can add a new feature (only available with the new technology) that will allow free-text searching of the contents, the table of contents, and the index;

- Still another person can create a robust resource around that original content (and/or all the other product features);

- This adding of values can continue as far and as wide as human imagination can reach and as deep as the effort invested.

The decentralization of the above environment allows each vendor of a given type of feature to focus on the quality and marketplace for that feature. The technology makes it possible to weave all these separate features together into the final product, the book. One of the crucial differences is that here, the reader has complete control over which vendor's features the reader wishes to utilize. If the reader prefers vendor-A's index over vendor-B's, then the reader can literally pick A's index to the original content. The content stays the same but the parties assembled to deliver the final product may change at any time and may have no business relationship amongst themselves.

For purposes of this discussion, the effect of the unbundling product features is a heightened complexity to the structure of a given Internet gambling enterprise. This complexity is the subject of the next section of this report.

The three separate paradigms for understanding the Internet, as discussed above, present the following combined framework for the issue of Internet Gambling:

In order to find legal responsibility, the technology is not necessarily relevant.

In order to understand how a given enterprise operates, technically, the nature of that enterprise's connection to the Internet and the number and various roles of intermediaries becomes relevant.

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In order to understand who the relevant parties are to a given Internet enterprise, the

nature and extent of feature-unbundling becomes important (the more the product features are

unbundled, the more potential parties are involved in creating the final product).

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The Operational Environment

The creation and maintenance of a website today is fast, easy and cheap. This easy entrance into the Internet marketplace means that more people can enter. It also means that "control" has become less attainable.

For the majority of traditional businesses, the cost and effort in starting the business is high. One must rent real estate, hire staff, purchase office equipment and supplies and the like. On the Internet, the equivalent of real estate is very inexpensive, and the rest of the office functionality can be automated. The difference reduces to a simple general rule: On the Internet businesses can start making money fast and develop aggressively at a minimal cost.

In the context of Internet gambling, the ease of entry combined with the unbundled marketplace presents a virtually unlimited number of variations in terms of the location of a gambling website and the configurations of parties involved.

An example of an Internet gambling website at one extreme of the spectrum would be a website that was created and maintained wholly by a single person (or enterprise), that is located on a computer owned by the same entity and that connects with the Internet directly at the backbone level. In this extreme example, there is only one party at issue. Assuming that party is located within the United States, that party would be wholly responsible for whatever wrongdoing took place in relation to the targeted website.

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Another example, taken from the other extreme of the spectrum would be a website in which

- Party-A develops the concept;
- Party-B develops artwork;
- Party-C contributes the underlying operational software;
- Party-D adds to the operational software with additional programming;
- Party-E provides hosting services;
- Party-F provides email services;
- Party-G provides help-desk support services; and
- Party-H provides marketing services.

From a business, operational standpoint, unbundling and distributing these different product features may be more efficient. Technologically, each service/feature vendor can integrate each feature into the larger enterprise efficiently since the enterprise is located on the Internet. The Internet environment was built to combine geographically disparate parties, using various, independent technology protocols into a single operating enterprise. Adept Internet gambling enterprises take advantage of the agility and capabilities of the Internet and related information technologies to restructure their business in order to maximize fiscal returns as well as market share.

Between the two extremes there exists an infinite number of combinations of unbundled feature delivery and single-entity work and ownership. A typical example would be an individual who creates his own gambling website and stores it on a computer (usually called a "server") in a location that has been made available to him free of charge based on some other existing relationship with the owner of that server. The gambling enterprise would operate via the website without the owner of the server's knowledge. However, since the owner of the

server has control over the space the gambling enterprise is operating within, the owner of the server also provides support and maintenance services.

The above discussion has focused primarily on the structure of the Internet gambling enterprise's technological operations. An entirely separate, although related issue is the geographic location of the various parts of that structure.

Given the global nature of the Internet and technological weaving function it can serve, to stitch unbundled features into a single, operating enterprise, finding and legally reaching the various parties to an Internet gambling enterprise becomes much more difficult than it might be if that enterprise were more traditional in its structure. In addition, the further removed a party website is from the entry-point of server ownership and/or backbone-level Internet access, the less information there is available for who that party is and what activities that party is engaged in. In other words, the more intermediary parties there are involved in the enterprise, the more layers of anonymity there are to hide behind. These issues are beyond the scope of this discussion.

The goal of this section of the report has been to provide a conceptual foundation for the larger issue of Internet and related information technologies, and specifically for the discussion of Internet gambling. If there are further issues which need to be explored, or if there is more detailed information that ought to be presented, the Information Technology and Law Section of the Pennsylvania Office of Attorney General is available at the Committee's discretion.

The final section lists examples of Internet gambling enterprises as well as resources to obtain additional information.

Resources and Examples

The following pages list both names of and links to further resources on the issue of

Internet Gambling. These lists are by no means exhaustive; in fact there are too may resources

and examples to reasonably include in a report like this. Please read the following as a sampling

of the type of resources that are available.

General Internet Resources:

Books:

- 10 Minute Guide to the Internet and World Wide Web by Galen Grimes, Rick Bolton.
- ABC's of the Internet by Kilpatrick, Hulegard
- The Internet for Dummies (5th Ed) by John R. Levine, Carol Baroudi, Margaret Levine Young
- Beginnernet : A Beginner's Guide to the Internet and the World Wide Web by Brian Pomeroy (Editor)
- Law and the Information Superhighway by Henry H. Perritt, Jr.
- … and many, many others (see http://www.amazon.com for a searchable list of books).

Internet websites:

- **Yahoo's (http://www.yahoo.com) Internet basics area.**[1]
  http://www.yahoo.com/Computers_and_Internet/Internet/Information_and_Document
  ation/
- **PBS' (http://www.pbs.org) Understanding and Using the Internet.**
  http://www.pbs.org/uti/
- **The World Wide Web Virtual Library**
  http://www.vlib.org/
- **Lycos (http://www.lycos.com) Internet area.**
  http://www.lycos.com/internet/

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[1] Note that Yahoo is a table of contents to information on the World Wide Web; one can click through the various
topics to find relevant information.

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- ... and many, many others.

Internet Gambling Resources:

- Casino.com
  http://www.casino.com/

- Global Casinos
  http://www.global-casinos.com/

- Vintage Slots
  http://www.vintageslots.com/casino5.htm

- Yahoo's Internet Gambling area
  http://www.yahoo.com/Business_and_Economy/Companies/Entertainment/Gambling
  /Casinos/Online_Casinos/

- ... and many, many more.

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Examples

The following pages are printed copies from actual online gambling enterprises. Given the computer-based nature of the World Wide Web, the printed versions of webpage do not conform well to the size of pieces of paper. Please excuse the appearance of these printed copies.

AnteUp gives you more by linking you to the sites with the the features you want including: No Minimums ($1.00 bets), Video Poker, Sports Picks & Advice, LIVE Action, Multi-Lingual, LIVE Chat, and much more!

are the place for you to ask questions about online gambling, share favorite gaming tips, and share sports picks with other AnteUp users.

Updated Daily **and always fresh, quick, and concise..**
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on the Internet?

FREE $$ to all new players

ODDS ARE, IT'S BETTER THAN SEX!

Bingo

Please help _____, proposed anti-gambling legislation sponsored by Senator Jon Kyl (R-AZ) in the Senate and Bob Goodlatte (R-VA) in the U.S. House of Representatives.
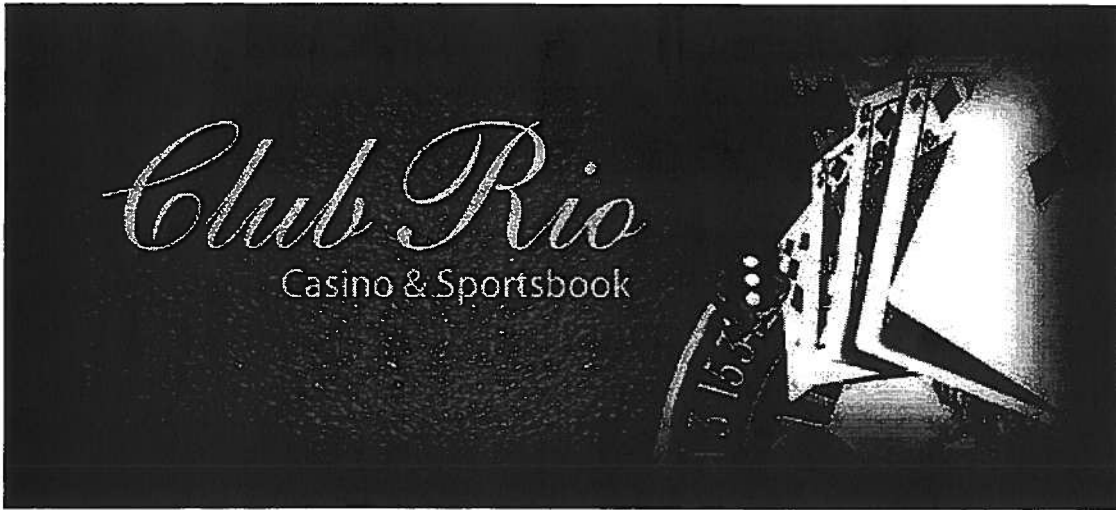
This site links to other sites that may contain gambling related content and/or online wagering.
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Consult your local authorities regarding wagering via the Internet before registering with any online wagering service.

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We now offer FREE TOUR for new visitors!!!
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Need help? Contact us or check our Information.

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DO NOT USE SPACES! CaSe SeNsItIvE!!!

Create Account Name [_____] (5-10 letters only, e.g. Az)

Create Entry Password [_____] (5-10 characters, except @)
Confirm [_____]

Create Withdraw Password [_____] (5-10 characters, except @)
Confirm [_____]

Age [YES. I am over 18 years of age ▼]

Sweepstakes [YES. I want to win cash ▼]

Rules [YES. I agree to all posted rules & regs ▼]

WARNING!!! YOUR ACCOUNT NAME MAY CHANGE. BE SURE TO WRITE DOWN YOUR NEW ACCOUNT NAME AND SELECTED PASSWORDS.

[CLEAR] [NEXT→]

Need Help? Contact us or check out Information.