

A collection of symbolic objects including a chessboard, medals, a compass, and glasses. The chessboard is in the top left, with several pieces visible. There are two medals: one with a red ribbon and a star, and another with a blue ribbon and a star. A compass is in the bottom left. A pair of glasses is in the center. The background is a light-colored, textured surface.

# **E-Business Security ~ Technical and Legal Issues**

## **Information Security and Forensics Society**

### **The Future Legal Framework of e-commerce**

**SIN Chung Kai  
Legislative Councillor (IT)**

**Nov 11, 2000**

# Agenda

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- A. Top Cyber-crime in US**
- B. Proposed legislation in US Congress**
- C. Proposal by Council of Europe**
- D. New Challenge**
- E. Difficulties in Law and Enforcement**

# A. Top cyber-crime in US

## Federal Bureau Investigation(FBI)

 **Insiders**

 **Hackers**

 **Virus Writers**

 **Criminal Groups**

 **Terrorists**

 **Foreign Intelligence Services**

 **Information Warfare**

 **Internet Fraud**

 **Intellectual Property Rights**

Source: Statement for the Record of Louis J. Freeh, Director Federal Bureau of Investigation on Cybercrime

# A. Top cyber-crime in US

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-  *2000 Computer Crime and Security Survey*
-  Computer Security Institute (CSI) & San Francisco FBI
-  273 organizations

# A. Top cyber-crime in US

 **90% detected computer security breaches within the last 12 months**

 **70% found a variety of serious computer security breaches liked**

 theft of proprietary information

 financial fraud

 system penetration from outsiders

 denial of service attacks

 sabotage of data or networks.

 **74% acknowledged financial losses due to computer breaches**

## B. 2000 Information Security Industry Survey

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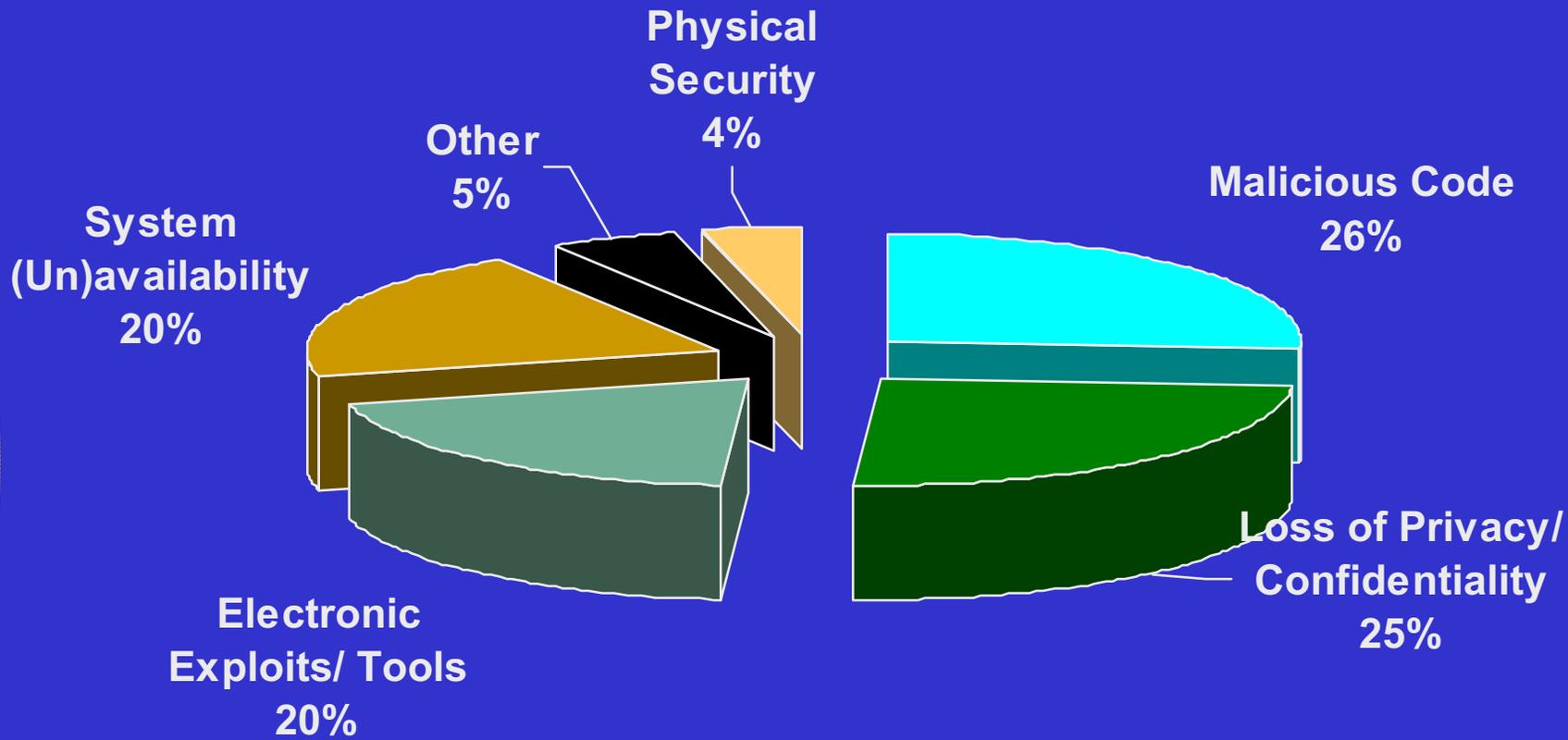
 Late June and Early July 2000

 1,897 infosecurity professionals

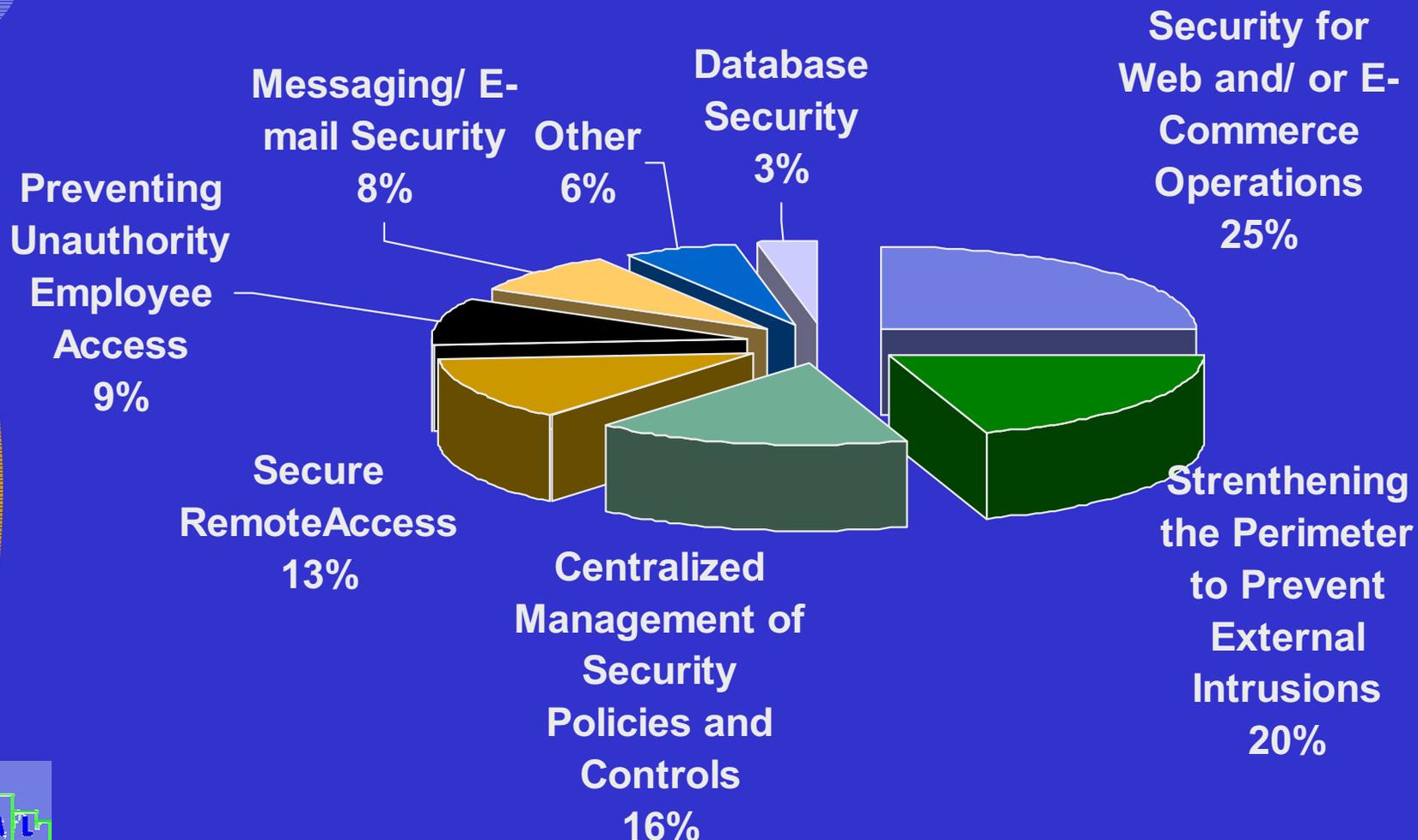
 1. “What is your single most important info-security concern?”

 2. “What is your most important program or project?”

# 1. Concern



## 2. Project/Program



## B. Proposed legislation in US Congress

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1. Privacy
2. Spamming
3. Intellectual Property
4. Internet Taxation
5. Internet Gambling
- 6 Electronic Signatures

# 1. Privacy

## 14 Bills in Year 2000

### a. Control of spyware

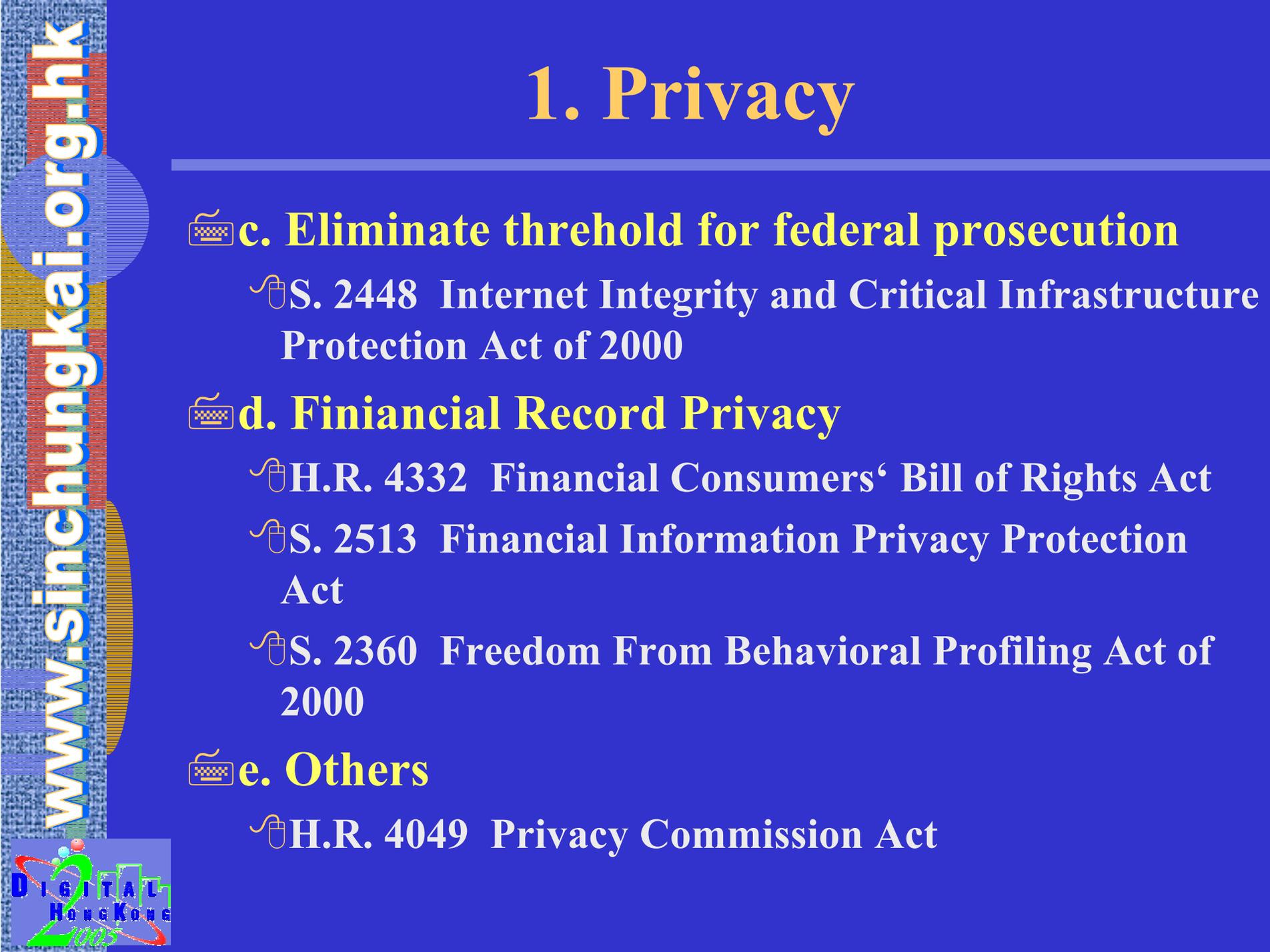
 H.R. 5571 Electronic Privacy protection Act

 S. 3180 Spyware Control and Privacy Protection Act of 2000

# 1. Privacy

## b. Privacy Policy

-  H.R. 5430 Consumer Online Privacy and Disclosure Act
-  H.R. 4908 Notice of Electronic Monitoring Act
-  H.R. 4059 Online Privacy Disclosure Act of 2000
-  H.R. 3560 Online Privacy Protection Act of 2000
-  S. 2928 Consumer Internet Privacy Enhancement Act
-  S. 2606 Telecommunications and Electronic Commerce Privacy Act
-  S. 2063/ HR 3770 Secure Online Communication Enforcement Act of 2000



# 1. Privacy

## c. Eliminate threshold for federal prosecution

-  S. 2448 Internet Integrity and Critical Infrastructure Protection Act of 2000

## d. Financial Record Privacy

-  H.R. 4332 Financial Consumers' Bill of Rights Act
-  S. 2513 Financial Information Privacy Protection Act
-  S. 2360 Freedom From Behavioral Profiling Act of 2000

## e. Others

-  H.R. 4049 Privacy Commission Act

# 1. Privacy

## a. Control of spyware

 **A software that collects information about the software users and transmits it back to the software company**

 **manufacturers would be required to**

-  **inform the use of spyware**
-  **obtain user consent**
-  **notify the users the kinds of information collected**
-  **method to disable the function of spyware**
-  **make it illegal to transmit users' information back to the software manufacturers if no permission**

# 1. Privacy

## b. Privacy policy

 Provision of public policy

 Require the Federal Communications Commission to create a uniform “seal program” based on the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data.

 Provide opt-out option

 Allow users to reach their own information

# 1. Privacy

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-  c. Eliminate threshold for federal prosecution
-  d. Strengthen the privacy provisions in the Gramm-Leach-Bliley Act
-  e. Others

## 2. Spamming

### 3 Bills in Year 2000

 **H.R. 5300 Wireless Telephone Spam Protection Act**

 **S. 2542 Controlling the Assault of Non-Solicited Pornography and Marketing (CAN SPAM) Act of 2000**

 **S. 2448 Internet Integrity and Critical Infrastructures Protection Act of 2000**

## 2. Spamming

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-  Provide valid identification information, routing information and opt-out address to receivers
-  Wireless spamming--messaging system of mobile phones

# 3. Intellectual Property

## 3 Bills in Year 2000

 **H.R. 5275 Music Owners' Listening Rights Act of 2000**

 enacted legislation Public Law 106-379

 **H.R. 5106 Copyright Technical Corrections Act of 2000**

 **H.R. 5107 Work made For Hire and Copyright Corrections Act of 2000**

# 4. Internet Taxation

 Prohibit multiple or discriminatory taxes on e-commerce

 Prohibit taxes on Internet access

 **H.R. 3709 Internet Nondiscrimination Act of 2000**

 **S. 2028 Internet Non-discrimination Act**

# 5. Internet Gambling

 Prohibit involvement in Internet gambling business

 H.R. 4419 Unlawful Internet Gambling Funding Prohibition Act

 H.R. 3125 Internet Gambling Prohibition Act of 2000

 S. 692 Internet Gambling Prohibition Act of 1999

# 6. Electronic Signatures

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-  Legalize the application of Electronic Signatures
-  Signed by President Clinton and became public law on June 30, 2000
-  Electronic Signatures in Global and National Commerce Act

# C. Proposal by Council of Europe



Convention of Cyber crime



European Committee on Crime Problems



[conventions.coe.int/treaty/EN/cadreprojets.htm](http://conventions.coe.int/treaty/EN/cadreprojets.htm)



Latest draft released on October 5, 2000  
(Version No 22)



Objections from Global Liberty Campaign  
Committee



Over 30 organizations jointly wrote to  
Council of Europe



[www.gilc.org/privacy/coe-letter-1000.html](http://www.gilc.org/privacy/coe-letter-1000.html)

# 1. Controversial proposals

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## a. Records Retention

🖨 Article 17, 18, 24, 25

🖨 require ISP to retain records regarding the activities of their customers

## b. Illegal devices

🖨 Article 6

## c. Crimination of copyright infringement

🖨 Article 10

## d. Protection of Children pornography

🖨 Article 9

# 1. Controversial proposals

## e. Investigation Authority

### Article 14 and 15

- i. Access and seizure of data by authority due to criminal investigation or proceeding.
- ii. Order person who has knowledge about the functioning of computer system.
- iii. Order people to submit information controlled.
- iv. Order ISP to submit subscriber's information.

# D. New Challenge

## Peer-to-peer Technology

 **Napster.com**

 **Gnutella**

 **DeCSS**

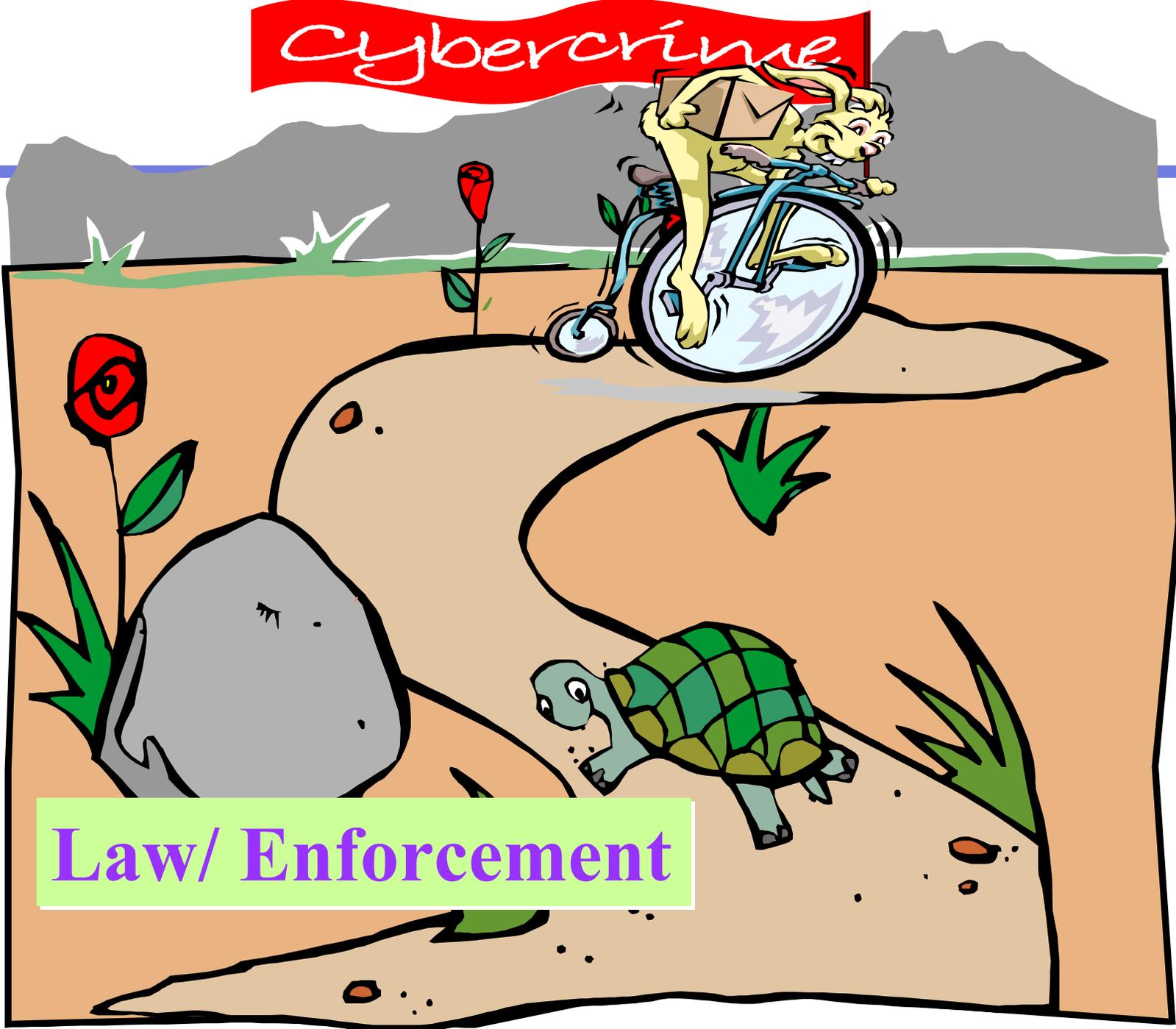
## Litigation in US

 Exchange of MP3 files and other file formats

 Bypassing through central servers

 Copyright infringement

Cybercrime



Law/ Enforcement

## E. Difficulties in Combating Cyber-crime

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1. Legislation
2. Jurisdiction
3. Evidence Collection

# 1. Legislation

 Existing laws applies

-  **Hacking: Telecommunication Ordinance**
-  **Privacy: Personal Data (Privacy) Ordinance**
-  **Spamming: *no legislation in Hong Kong***
-  **Intellectual Property: Copyright Ordinance**
-  **Pornography: Control Obscene and Indecent Article Ordinance**
-  **Digital Signature: Electronic Transactions Ordinance**
-  **Criminal Ordinance**

# New Legislation

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 working group lead by Deputy Secretary for Security

 Draft in 2001

# 2. Jurisdiction

## Trans-border crimes

 Internet has no border

 Jurisdiction has !

 Nazism is an offence in Germany but not in most other countries.

# 3. Evidence Collection

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[www.sinchungkai.org.hk](http://www.sinchungkai.org.hk)



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