



**Countering spam:  
a cross border issue**

Claudia Sarrocco  
ITU Strategy and Policy Unit

INT / MSU  
Summer Programme  
2004

Geneva Switzerland  
05 July 2004



# What is spam?



# Definition

The practice of sending **unsolicited** e-mails, most frequently of a **commercial** nature, in **large numbers** and repeatedly to individuals with whom the sender has **no previous contact**, and whose email address may be found in a public place on the Internet, such as newsgroups, mailing lists, directories or websites. (*CNIL*)

- ✓ **Unsolicited**
- ✓ **Commercial**
- ✓ **Bulk**
- ✓ **Electronic communication**

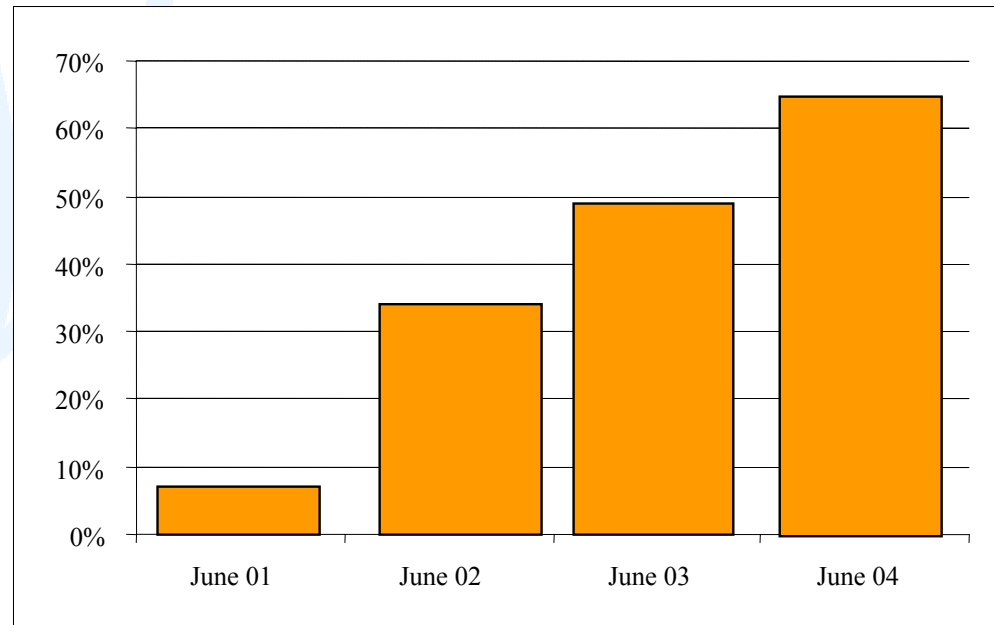


# Spam spam spam

- **Wireless spam: SMS, MMS, email over mobile devices...(and SMS scams)**
- **“Spim”**: spam over Instant Messenger
- **Spam viruses and worms – spam to diffuse viruses and spyware**
- **Spam and frauds – 9% of spam contains deceptive content (Nigeria scam), 5% fraudulent content (i.e. phishing)**

# Some numbers

- **About the 64% of global email messages are spam  
In 2001 they were only the 7% (*Brightmail*)**
- **Cost of spam to Internet users: 10 billion  
Euros/year (*European Commission*)**
- **AOL and Hotmail: block about 2 billion spam  
messages a day**
- **Major spammers:  
United States  
China  
Brazil  
Canada  
(*Spamhaus*)**





# Why spam?

- **Cost:** the cost of direct marketing through email is particularly low with the average cost for every email sent: 0.0005 (USD) – (0.0001 marginal cost for any additional message sent)
- **Anonymity:** the protocol currently used (SMTP) allows spammers to hide the origin of the message and remain anonymous → Enforcement problem
- **Effectiveness:** about the 7% of spam gets an answer → 1 sale out of 100,000 emails is enough for the spammer to make a profit (*FTC, 2003*)

**Spam is financially profitable**



# Impact on society

**Spam shifts the cost involved in direct advertising from the sender onto the consumer and other parties**

- **Direct impact:**

- Wasted time
- Productivity loss
- Higher demands on technical support and software
- Higher bandwidth consumption

- **Indirect impact:**

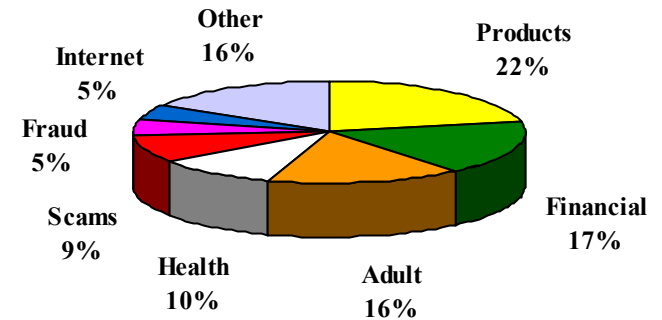
- reliability of email as a communication tool (false positives, etc)
- Security: viruses, spyware...

# Consumers concerns

## Spam content

- Frauds
- Scams
- Pornography


## Loss of trust in email, e-commerce, and in general on the Internet



**PayPal®** [Log Out](#) | [Help](#)

My Account | Send Money | Request Money | Merchant Tools | Auction Tools

---

**Sellers Account Verification** Secure Verification 

Your credit/debit card information along with your personal information will be verified instantly.

All the data is protected by the industry standard [SSL](#) encryption. All information is required and is kept confidential in accordance with [PayPal Privacy Policy](#).

*\*Your credit/debit card information is needed to verify your identity.*

**Account information**


\*\*\*All the fields are necessary.

Email Address :

Password :

---

**Credit/debit card information**



Card type :   Credit  Debit

Issue Bank Name :

Card number :

Expiration date :

CVV code :  3 last digits at the back of your card; next to signature

Name on card :

Billing address :





# Solutions?

- **Consumer protection**
- **Technical solutions**
- **Legislation**
- **International cooperation**



# Consumer protection

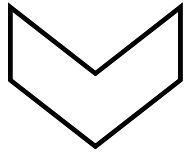
**Several initiatives have been undertaken recently:**

- **France: boîte à spam**
- **FTC: Anti-fraud information for users**  
<http://www.ftc.gov/spam/>
- **Consumers associations: Trans Atlantic Consumer Dialogue (TADC)**
- **Australian Communication Authority: how to avoid becoming an accidental spammer**  
[http://www.aca.gov.au/consumer\\_info/spam/consumerinformation.htm](http://www.aca.gov.au/consumer_info/spam/consumerinformation.htm)

# Technical solutions

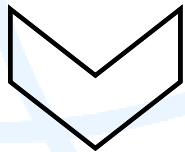
**Source  
Email Server**

- Rate limiting
- Authentication
- Payment



**Destination  
Email Server**

- Rate limiting
- Reputation System
- Checksum



**End user  
Email Client**

- Static Filtering
- Adaptive Filtering
- Reputation system



# Legislation and enforcement

- **US CAN-SPAM Act (2003)**
- **EU Directive 2002/58**
- **Australia anti spam law 2003**
- **Korea**
- **...**

## **Covering:**

- **Opt-in or opt-out**
- **Sender identity**
- **Address gathering**
- **Misleading information in Subj. line**
- **Labels**

<http://www.itu.int/osg/spu/spam/law.html>



# Non-spam laws

- **Breach of contract (with ISPs)**
- **Violation of privacy (Collecting e-mail addresses for one purpose but then using them for another)**
- **Trespass of personal property**
- **Criminal law (fraud)**
- **Consumer protection (deceptive commercial practices, misleading information, etc.)**



# Enforcement

**Internet matters:** borderless, they touch on usually more than one authority (NRA, DPA, CPA).

**Additional problems with spam:** spammers' anonymity.

**Consequences:** enforcement is difficult, time consuming and expensive

AOL, Yahoo, EarthLink and Microsoft joined forces to pursue spammers



# International cooperation

## Two objectives:

- promote the adoption of effective legislation and common standards in countries which do not yet have them
- Encourage countries to cooperate to ensure the effective enforcement of applicable rules



# Bilateral and multilateral coop.

**United States, United Kingdom, and Australia:**

**Memorandum of Understanding (MoU) on mutual enforcement assistance in commercial email matters.**

**(Information sharing, cooperation in detecting and investigating spam violations, cooperation in tracking spammers, exchange of evidence, facilitation of law enforcement against spam violators, and coordination of enforcement against cross-border spam violations)**

**Other anti-spam projects:** ITU; OECD; APEC; Operation Secure your Server; International Consumer Protection and Enforcement Network (ICPEN); etc.





# Conclusions: Act locally, think globally

- **Role of users**
- **Role of private sector**
- **Role of governments**



# Thanks!

More information and materials:

[www.itu.int/spam](http://www.itu.int/spam)

Claudia Sarrocco

Claudia.sarrocco at itu.int