



thus™

Thus plc

# Financial Regulation from an ISP's Viewpoint

Richard Clayton

Consultant Internet Expert

[richard.clayton@thus.net](mailto:richard.clayton@thus.net)

Amsterdam:

4 March 2003



# Outline

- What is an ISP?
- What does an ISP know about its users?
- What data does an ISP keep and why?
- How long is this data kept?
- Is this data available to investigators?
- What about surveillance?
- Are the ISPs going to stop securities fraud?
- Caveats about countries
- Key messages

# What exactly is an ISP?

- Internet Service Providers provide connectivity and MAY provide other services such as email, web hosting, file distribution, etc etc
- They are NOT
  - regulators or law enforcement
  - subject to foreign laws
- They have obligations to
  - users - confidentiality
  - users - data protection
  - courts - injunctions, court orders
  - police - warrants etc

# What does an ISP know about its users?

- **ISP may charge for access**
  - credit card or cheque may be traceable
- **ISP may get rake-off from the telco**
  - CLI may allow caller to be located
- **Access may be for cash (ie anonymous)**
  - wireless hot-spots
  - usage from Internet cafes
  - hotels, corporate sites, universities
- **ISP cares about money NOT identity**

# What data does an ISP keep and why ?

- **ISPs will record usage**
  - of connectivity
  - of email services (to, from, size)
  - of uploading files
- **Data is kept for business purposes**
  - to settle disputes
  - to track spammers
  - to debug failing systems

# How long is communications data kept?

- **EU Data Protection Directive 95/46/EC**
  - personal data must be deleted when not needed any more for business purposes
- **EU Telecomms Privacy Directive 97/66/EC**
  - call data must be deleted when no longer needed for billing
- **Most data gone within a month or three**
- **Data Retention regimes being promoted by police, but costs are high and opposition substantial**

# Can investigators access comms data?

- **ISPs beginning to insist on paperwork**
  - concerns about data protection & confidentiality
  - cost of providing data is becoming significant
- **UK still using DPA 29(3) loophole**
- **UK Regulation of Investigatory Powers Act 2000**
  - self-authorized notice from police
  - adding other authorities very controversial
- **UK Financial Services Authority has own Act**
  - unclear if these “legacy powers” will survive



# What about surveillance?

- **Access to content is ‘interception’**
  - requires warrant signed by UK minister
  - significant technical challenges for IP traffic
- **Real time access to traffic data unlikely**
  - if possible is likely to be expensive
  - unlikely to be proportionate
- **Some traffic (eg to financial websites) will be encrypted and therefore will be unreadable to eavesdroppers**

## What about “web logs”?

- Website logs mainly owned by customers
  - deletion policy under customer control
  - logs can be BIG so pressure to delete
- Web proxy caches
  - in principle will indicate which pages were accessed
  - but not universal (and usage may be optional)
  - HTTPS (secure access) will bypass cache
  - the logs are **E N O R M O U S** so records are kept for hours not days (if indeed the logging is switched on at all)

## Caveats about countries

- **EU Directives apply across Europe**
  - though some countries have still to enact many of them
- **Unclear if Data Retention will become EU standard**
  - could be a data preservation regime as in US
- **Many details about access to data will differ**
  - but data held will remain similar
  - and business models will be similar

# Are ISPs going to deter securities fraud?

- Dumb question - but it's in the briefing!
- ISPs are not regulators
- ISPs are not police officers
- Of course ISPs want to be good citizens
- BUT their customers have rights as well
- AND the law must be obeyed
- AND they don't have much money any more!

## Key messages

- This is all 'old hat'
  - You're on a well-trodden path
- There *is* traceability *to accounts*
  - so you can usually shut things down
  - but expect to get 'intelligence' not 'evidence'
- Data is not kept for long - Get A Move On!
- Must know what to ask for and what it means
  - expect to invest heavily in training
- Abroad is a foreign country:
  - they do things differently there



thus™