

CE0973a - Issues in Network Security 12: Roundup, Law and Ethics

James A Sutherland

Abertay University

Monday, 11th April 2016

Past Papers

2010	Passwords, MAC spoofing, Law and Ethics
2011	???
2012	DoS/DDoS, Keyspace/rainbow tables, scanning/switching
2013	Passwords, Firewalls, Malware
2014	App, transport layer attacks, hacking/firewalls, intruders
2015	X509, filter types and features, IDS types and features
2016	Coming soon ...

2016 Exam Format

Minor change from previous years:

- 1 First question: compulsory
- 2 Choice of remaining two

Law and Ethics

- We're not lawyers!
- Need to understand the law though
- Contracts, duties, delict
- Politics too
- Subpoenas, warrants, assistance

Contract, Duties, Delict

- Key aims: do get paid, don't get sued!
- Contract: consensus, consideration (except Scotland sometimes!), capacity
- Don't breach it, or court can enforce
- Delict (Tort elsewhere)
 - Duty of care owed
 - Duty of care breached
 - Damages caused
- If in doubt, get proper legal advice to cover your back. Indemnity!

Data Protection Act

- Data Protection Act 1984 ¹
- Data Protection Act 1998 ²
- Privacy and Electronic Communications Regulations 2003 ³
- People get rights
- Companies get obligations

¹http://www.legislation.gov.uk/ukpga/1984/35/pdfs/ukpga_19840035_en.pdf

²<http://www.legislation.gov.uk/ukpga/1998/29/contents>

³<http://www.legislation.gov.uk/uksi/2003/2426/contents/made>

Data Protection Law

- Fair and lawful processing
- For lawful purpose, not repurposed
- Adequate, not excessive
- Accurate and current where applicable
- Not retained longer than necessary
- Kept secure (TalkTalk take note. . .)

Lawful Processing Reasons

- Consent (except national security, crime/tax, domestic)
- Contract
- Legal obligation
- Interests of the subject
- Public functions
- Legitimate interests and not prejudicial

Computer Misuse Act

Early computer hacking and phreaking was difficult to prosecute; sometimes charged as 'theft of electricity'!
UK: Computer Misuse Act 1990⁴ addressed this, making it a crime to:

- Knowingly
- Without authorisation
- Use computer intending to cause access to any program or data
- Two years prison
- Five years, in connection with any other crime

⁴<http://www.legislation.gov.uk/ukpga/1990/18/contents>

DoS Law

- Impair operation, access to program or data
- DoS: Ten years
- Serious damage . . . life in prison (human health/infrastructure, economy, environment, national security of *any* country)

Defences, Criminal v Civil

- Guilty beyond reasonable doubt for criminal
- Prosecution must prove the act was knowingly unauthorised
- Balance of Probabilities for civil
- Pen-test: get proof of authorisation, get out of jail free.
- Liability is trickier. . .

Ethics

- Privacy
- Reporting
- Whistle-blowing
- Government assistance

Week 12 Tasks

- Revise
- Try writing a client agreement for pen-testing (not marked)
- Mark in lab 9-11 tomorrow, or email any questions