

Databases

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Legislation

Laws can be national or international. A lot of EU law has been adopted by the UK and carried through even after Brexit.

A civil case may end up with one side being awarded damages. A criminal case may end up with a fine or a prison sentence.

It is illegal to:

- Store or process personal data without keeping it secure, among other conditions
- Make or trade in hack tools - hardware or software
- Make digital copies of other people's work without permission
- Intercept messages such as phone calls or emails without legal authority to do so

The Big Four Acts

The **Data Protection Act 1998** controls the way that data about living people is stored and processed.

The **Computer Misuse Act 1990** makes it an offence to access or modify computer material without permission.

The **Copyright, Designs and Patents Act 1988** covers the copying and use of other people's work.

The **Regulation of Investigatory Powers Act 2000** regulates surveillance and investigation, and covers the interception of communications.

The Data Protection Act 1998

This act controls the way that data about living people is stored and processed.

Storage and processing of personal details must:

1. Be fair and lawful
2. Relevant and not excessive
3. Accurate and up to date
4. Only kept as long as needed
5. Only be used for the stated purpose
6. Be kept securely
7. Handled in line with people's rights
8. Not be transferred to countries without protection laws

'Personal details' refers to living, identifiable people. This act includes paper and digital records. Exceptions are:

- National security, like data about suspected terrorists
- Crime and taxation, like policy surveillance
- Domestic purposes, like an address book

This is not foolproof, however. Companies experience data breaches on a semi-regular basis and the results are not good for the customers.

Computer Misuse Act 1990

This act makes it an offence to access or modify computer material without permission. It makes 'hacking' a crime.

It covers:

- Unauthorized access to computer material
- Unauthorized access with intent to commit or facilitate a crime
- Unauthorized modification of computer material
- Making, supplying, or obtaining anything which can be used in computer misuse offences

Examples include:

- Making or intentionally spreading a virus
- Attempting to login without authorization
- Using someone else's login
- Reading, changing, or deleting data without permission
- Obtaining or creating a 'packet sniffer'

Copyright, Designs and Patents Act 1988

This protects creators of books, music, video, and software from having their work illegally copied. It applies to all forms of copying.

Digital storage hardware is very small and efficient, and fast broadband means that copies can be shared around the world very quickly. It is very easy to spread copies of digital media.

The software industry can take some steps to prevent illegal copying of software. For example:

- The user must enter a unique key before the software is installed
- Some software will only run if the CD is present in the drive
- Some applications will only run if a dongle is plugged in
- Some applications have always-online-DRM, which means they need a continuous internet connection

Tools used to create software may require fees if the software is then sold. Applications, games, books, films, and music are all protected, but algorithms cannot be copyrighted.

Regulation of Investigatory Powers Act 2000

This act:

- Requires ISPs to secretly assist in surveillance

- Enables mass surveillance of communications in transit and monitoring of internet activities
- Enables certain public bodies to demand that someone hand over keys to protected information
- Prevents the existence of interception warrants and any data collected with them from being revealed in court

As technology develops, laws may change. The UK Government has proposed an Investigatory Powers Bill to deal with interception of communication and acquiring bulk personal data. It's not good.