TPM: The Case Against

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S226 Definitions

• **TPM** or **technical protection measure** includes any process, treatment, mechanism, device, or system that is designed in the normal course of its operation to prevent or inhibit the unauthorised exercise of any of the rights conferred by this Act



- iTunes AAC
- Microsoft"PlaysForSure"
- DVD CSS
- eBook Readers
- Sony XCP CD Copy Protection

S226 Definitions ...

TPM spoiling device means a device or means that--

(a) is primarily designed, produced, or adapted for the purpose of enabling or facilitating the circumvention of a technological protection measure; and

(b) has no significant application except for its use in circumventing a technological protection measure



- FairKeys, e.g., JHymn so you can backup music.
- decss to format shift movies.
- PDF viewers so you can copy and paste.
- Anti-RootKit software.

S226A(I)

A person (A) must not make, import, sell, let for hire, offer or expose for sale or hire, or advertise for sale or hire, a TPM spoiling device that applies to a technological protection measure if A knows or has reason to believe that it will, or is likely to, be used to infringe copyright in a TPM work.

$S_{226A(2)}$

A person (A) must not provide a service, including the publication of information, if--

- a. the service or the information is intended to enable or assist persons to circumvent a technological protection measure; and
- b. A knows or has reason to believe that the service or the information will, or is likely to, be used to infringe copyright in a work that is protected by a technological protection measure

S226D

(1) The rights that the issuer of a TPM work has under section 226B do not prevent or restrict the exercise of a permitted act.

S226D(2) ...

(2) The rights that the issuer of a TPM work has under section 226B do not prevent or restrict the making, importation, sale, or letting for hire of a TPM spoiling device to enable a qualified person to--

(a) exercise a permitted act; or
(b) correct an error in a computer program; or
(c) effect interoperability of software; or
(d) undertake encryption research.



(3) In this section and in section 226E, qualified person means--

(a) a prescribed library; or

(b) a prescribed archive; or

(c) an educational establishment.



(4) A qualified person must not be supplied with a TPM spoiling device on behalf of a user unless the qualified person has first made a declaration to the supplier in the prescribed form.

S226E

The user of a TPM work who wishes to exercise a permitted act allowed under this Act but cannot practically do so because of a TPM may--

(a) apply to the copyright owner or the exclusive licensee for assistance enabling the user to exercise the permitted act;

S226E...

(b) engage a qualified person (see section 226B(3)) to exercise the permitted act on the user's behalf using a TPM spoiling device, but only if the copyright owner or the exclusive licensee has refused the user's request for assistance or failed to respond to it within a reasonable time.

Problem 1: Nobody Can Distribute Spoilers

S226A(I)

A person (A) must not make, import, sell, let for hire, offer or expose for sale or hire, or advertise for sale or hire, a TPM spoiling device that applies to a technological protection measure if A knows or **has reason to believe that it will, or is likely to, be used to infringe copyright in a TPM work**.

Infringement is Subjective

- Copying to backup
- Copying to review
- Copying to share
- Copying to archive
- Copying to sell



If I create a tool that enables copies, it will be used to make illegal copies. By S226(A)(1) all such tools are illegal.

Problem 2: Nobody Can Make Spoilers

S226D(2) ...

(2) The rights that the issuer of a TPM work has under section 226B do not prevent or restrict the making, importation, sale, or letting for hire of a TPM spoiling device to enable a **qualified person** to--

(a) exercise a permitted act; or
(b) correct an error in a computer program; or
(c) effect interoperability of software; or
(d) undertake encryption research.



Only academics, archivists, and librarians may fix bugs or effect interoperability of software.

Who's Left Out?

- Commercial developers of compatible systems
- Open source developers of compatible systems
- Systems administrators
- Local gurus fixing bugs
- Encryption researchers not at universities

Problem 3: Nobody Is Meant To Use Spoilers

S226E

The user of a TPM work who wishes to exercise a permitted act allowed under this Act but cannot practically do so because of a TPM may--

(a) **apply to the copyright owner** or the exclusive licensee for assistance enabling the user to exercise the permitted act;

S226E...

(b) engage a qualified person (see section 226B(3)) to exercise the permitted act on the user's behalf using a TPM spoiling device, but **only if the copyright owner or the exclusive licensee has refused the user's request for assistance or failed to respond to it within a reasonable time**.

False Assumption

- The bill assumes it will be rare for TPM to obstruct legitimate use of the material.
- Therefore spoiling can be onerous.
- Past TPMs have been harmful.

Bad TPM

- Sony XCP, aka rootkit
- DVD regions
- MSN Music, Zune incompatibility ("PlaysForSure")

Apple iTunes

- Apple can change the rules at any time: in April 2004, lowered number of playlist burns from 10 to 7
- Breaks the right of first sale in the US.
- No quotation.

My Proposed Fix

- Drop the whole TPM and spoiler section.
- Consumers bear the cost: TPM on DVDs hasn't stopped pirates (35M pirated discs seized in 2005) or the tech-literate.
- It's already a crime to copy, so prosecute the crimes you already have.

There's No Saving It

- Even if you let open source and commercial developers interoperate and fix bugs
- Even if you removed the paperwork barrier to using spoilers ...

There's Still People

• If you release a tool that permits legitimate copying, it will be used for illegitimate copying.

S226 must go.

Thank you.

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