Technological Protection Measures and Access to Knowledge

El Derecho de Autor: Nuevos Temas en el Entorno Digital Lima, October 14, 2005

Gwen Hinze
International Affairs Director
gwen@eff.org



Why Technological Protection Measures?

- U.S. Digital Millennium Copyright Act
- U.S. Free Trade Agreements Chile,
 CAFTA
- Unintended Consequences
- Costs and benefits

Digital Millennium Copyright Act

- Prohibits:
 - (1) circumvention of "technological measures" that control access to copyrighted works
 - DVDs
 - (2) Tools that can circumvent technological *access* controls, and *use* restriction controls.
 - DeCSS, to make back-up copy of DVD
 - Software to remove CD copy-protection
- Report: "Unintended Consequences: 5 Years under the DMCA" (Spanish)
 http://www.eff.org/IP/DMCA/unintended_consequences.php
- U.S.- Chile TLC Art. 17.7(5), CAFTA Art.15.5(7)



Overbroad TPM Regimes Impair Access to Knowledge

- Override national copyright law exceptions and limitations
- Increase cost of accessing information
- Chill scientific research
- Harm competition
- Stifle technological innovation
- Threaten free and open source software

National Copyright Law Supplanted

- Protection beyond copyright.
- Copyright law's balanced set of rights replaced by "anti-circumvention" law
 - U.S. statutory exceptions overridden
 - Fair Use
 - Tools ban
- Copyright balance redrawn by unilateral action of copyright owner
 - Foreign copyright owners' rights trump national law exceptions and public policy priorities

Impairs Access to Digital Information

- Fair dealing and personal copying exceptions that previously guaranteed access will be precluded for technologically-protected information.
- TPMs can override First Sale libraries.
- Widening of knowledge gap between industrialized and developing economies.

Chilling Effect on Scientific Research

- Threatens scientific research and publication
 - Music industry group threatened to sue Professor Felten for publishing research paper on security vulnerabilities
- Chilling effect on other scientists and researchers
- Weakens computer security
 - Former White House Cyber Security adviser calls for DMCA Reform because U.S. security research weakened.

Stifles Competition

- Prevents creation of new interoperable products.
- Product lock-in at higher monopoly-based prices:
 - Lexmark printer cartridges.
- Rights beyond copyright:
 - Region-coded DVDs, games, printer cartridges.

Stifles Technology Innovation

- Control over content player:
 - DVD players.
- Threat to free and open source software development:
 - Impairs reverse-engineering to create new products.
 - Technology standards + DMCA: US Broadcast Flag would preclude FOSS digital televisions.

Costs versus Benefits

- Do TPMs prevent piracy?
 - Not effective at keeping copyrighted works off the Internet (DVDs)
 - Why DRM will never work "The Darknet and the Future of Content Distribution" Peter Biddle,
 Paul England, Marcus Peinado, and Bryan Willman (Microsoft Corporation 2002)