

**STATEMENT OF THE ELECTRONIC FRONTIER FOUNDATION ON
THE PROPOSED W.I.P.O. BROADCASTING TREATY (SCCR /11/3)**

**STANDING COMMITTEE ON COPYRIGHT AND RELATED RIGHTS, ELEVENTH SESSION
JUNE 7-9, 2004**

The Electronic Frontier Foundation (EFF) appreciates the opportunity to submit these comments to the Standing Committee on Copyright and Related Rights of the World Intellectual Property Organization on Article 16 of the proposed Treaty on the Protection of Broadcasting Organizations (the proposed Treaty).

Article 16 requires legal sanctions against circumvention of technological measures used by broadcasters. EFF believes that the broadcaster technological measures in Article 16 are not required for the protection of broadcasters' signals and should not be incorporated in the proposed Treaty for four reasons:

1. They open the door to an unprecedented range of technology mandates which will constrain technology development;
2. They are ineffective to achieve their purpose but impose collateral damage on competition, technological innovation and consumers' traditional rights;
3. They are unnecessary; and
4. They harm the exchange of information in the public domain.

In addition, Alternative V of the proposed Treaty poses additional threats to consumers, scientific research and technological innovation.

1. Article 16 Opens the Door to Unprecedented Technology Mandates

Article 16 would require Member Countries to adopt extensive mandates over the design of commonplace technology like televisions and radios. Article 16 envisions broadcasters "marking" broadcast signals, cable transmissions and webcasts with something like a "broadcast flag." All signal-receiving devices -- even personal computers -- must then be designed to detect and respond to the flag.

Imposing this sort of government mandate on emerging broadcast technologies (such as digital television and radio) is detrimental for innovation and competition policy. These mandates will also restrict private, non-commercial uses of broadcasting content that are reserved to the public, researchers, archivists and educators under existing national laws. For instance, a legally-backed technological measure could restrict in-home recording of broadcast television for personal, non-commercial use, or "time-shifting," which in United States' law is recognized as lawful fair use and not copyright infringement. Absent any evidence that non-commercial uses pose any substantial harm to broadcasters, the imposition of a technology mandate regime is premature.

A broadcaster technological protection measure regime is likely to have more far-reaching consequences on technological innovation and information distribution than the parallel copyright rightsholder technological protection measure regime under Article 11 of the WIPO Copyright Treaty and Article 18 of the WIPO Performances and Phonograms Treaty for two reasons.

(1) The 1996 treaties leave room for “no mandate” type provisions in national implementation law. That means that consumer electronics, telecommunications devices and computing products do not have to be designed to detect and respond to particular technological measures.¹ These types of provisions are necessary to minimize a) anti-competitive uses of technological measures backed by legal sanctions and b) attempts by rightsholders to use technological measures to ban or lever control over technologies that interoperate with their copyrighted works that would otherwise stifle technological innovation.

Unlike the rightsholder regime, a broadcaster technological measure regime leaves no space for a “no mandate” safeguard. A broadcast in a particular country must meet that nation’s broadcasting standard (for instance, PAL or NTSC format). Any technology designed to receive broadcasts in that country must necessarily interoperate with that nation’s broadcast signal. If the broadcast signal incorporates a technological measure, all devices must respond to it. While a device could be designed to ignore a technological measure, it will not be able to receive the signal broadcast in that country. As a result, a broadcaster technological measure regime necessarily imposes technology mandates for a broad range of consumer technologies, which is likely to stifle technological innovation and increase the cost of developing new broadcast technologies.

(2) A broadcaster technological measure regime is likely to erode Member States’ national sovereignty in technology regulation. Electronics are strongly standardized across international borders. In practice, this means that governmental mandates imposed in a few large electronics markets will become the *de facto* requirements for all Member States, regardless of variations in national implementation laws.

2. Article 16 Is not an Effective Way to Protect Intellectual Property Rights

In practice, technological measures have proven to be a failure when it comes to protecting intellectual property rights. At the same time, technological measures have imposed significant collateral costs on the public interest that outweigh any benefit to rights holders in those countries that have implemented the similar provisions in the WCT and WPPT. In light of this, there is no reason to grant legal protection for a further and broader layer of technological measures for broadcast signals, cable transmissions and webcasts.

The collateral damage caused by legal measures aimed at backing technological protection measures has proven to be substantial. For instance, rightsholder technological measures in national legislation have resulted in significant harm to competition, technological innovation, scientific research and freedom of expression. In

¹ See, for instance, section 1201(c)(3) of the U.S. Copyright Act: “Nothing in this section shall require that the design of, or design and selection of parts and components for, a consumer electronics, telecommunications, or computing product provide for a response to any particular technological measure, so long as such part or component, or the products in which such part or component is integrated, does not otherwise fall within the prohibitions of sections (a)(2) or (b)(1).”

the U.S., these provisions have resulted in a distinguished computer security professor being threatened with legal action for publishing an academic paper at a conference and a foreign computer researcher being jailed for creating software that was legal in his home country. In addition, copyright owners have used technological protection measures to lever control over new uncopyrightable technologies that interoperate with their copyrighted works and to block their competitors' products coming to market. For instance, Lexmark, the second largest printer manufacturer in the United States, has used technological protection measures to block the sale of recycled Lexmark printer cartridges that were available to consumers at a lower price than Lexmark's own recycled and new cartridges. And a garage door opener manufacturer has sued its main competitor for distributing a universal garage door remote opener that can interoperate with its garage doors and several other brands of garage doors².

For all that, these measures have not had *any* appreciable effect in preventing or even slowing widespread digital infringement. For instance, despite prohibitions on the circumvention of technological protection measures on movies on DVDs, DVD copying programs remain widely available. Furthermore, these technological protection measures have not put one cent in the pocket of a creator.

The experience with technological protection measures on copyrighted works suggests that it would be unwise to extend similar legal protections to broadcasts, cable transmissions, and webcasts. Since national laws are in the process of evolving, and existing market incentives continue to be adequate to sustain a myriad of profitable broadcasters and attract substantial investment in next generation broadcast technologies, there is no need for potentially harmful intervention through international treaty harmonization.

3. Broadcaster Technological Measures Are Unnecessary

Article 16(1) is based on similar provisions for technological protection measures used by copyright holders in Article 11 of the WIPO Copyright Treaty of 1996 (WCT) and related rightsholders in Article 18 of the WIPO Performances and Phonograms Treaty (WPPT). These provisions were incorporated in the 1996 treaties to provide an incentive for rightsholders to make copyrighted works available in digital format. Rightsholders argued that legal sanctions for circumventing their technological protection measures were required to combat the new threats presented by the Internet. Legal sanctions for circumventing technological protection measures were necessary because once a technological measure was broken, millions of copies of the work could be distributed across the world. In the absence of a strong legal ban on circumvention, rightsholders argued that they would have no incentive to make works available digitally.

However, the same is not true for broadcasters. There has been no credible evidence that broadcasters have inadequate incentive for investment in broadcast technology. Broadcasters do, in fact, already make content available and have deeply penetrated

² For further details, see EFF Report "Unintended Consequences: Five Years Under the Digital Millennium Copyright Act", at <http://www.eff.org/IP/DMCA/unintended_consequences.php>

markets around the world, notwithstanding the existing possibility for signal theft.

Moreover, rightsholders and holders of related rights can already use technological measures to protect their copyrighted content in broadcast signals. Thanks to the 1996 WCT and WPPT, a growing number of existing national laws³ already provide legal recourse against those who would circumvent these technological measures.

In the SCCR discussions, the stated objective for the proposed Treaty has been protecting broadcasting organizations' signal, independently of the *content* carried by or embodied in the signal⁴. Broadcasters do not require technological protection measures to protect against theft of their signal, independent of the content in that signal.

4. Article 16 Would Harm the Flow of Information in the Public Domain

Article 16 would give broadcasters greater control over material carried by a broadcast than rightsholders possess in the underlying content. This would create a new right for broadcasters to control the uncopyrightable and restrict access to material in the public domain. This is likely to undermine or eliminate the public's existing rights of access under national copyright law regimes and will harm educators, students, researchers, libraries and archives, which seek access to broadcast content for legitimate and socially beneficial uses.

Under the proposed treaty, broadcasters can restrict access to and the distribution of content that is not copyrightable, is in the public domain, or is made available for distribution by its creator. While this content could not be protected by *rightsholder* technological protection measures because it is not copyrighted, broadcasters could use technological measures to preclude access to broadcasts, cable transmissions and webcasts of this material. This is due to two factors. First, the proposed treaty does not require broadcaster technological measures to follow the same boundaries as rightsholder technological measures. Broadcasters can use technological measures "in connection with the exercise of their rights under this Treaty and that restrict acts, in respect of their broadcasts, that are not authorized or are prohibited by the broadcasting organizations." This would extend to transmission of uncopyrighted content. Second, the draft treaty is not limited to merely protecting broadcasters' signals. It gives broadcasters related rights in downstream uses of fixations of their broadcast signals (for instance, deferred transmission of fixations in Article 11), which appear to overlap with the rights of copyright owners and related rights holders. When these broad rights are combined with broadcaster technological measures, broadcasters would have the ability to impede the

³ See, for example, the U.S. Digital Millennium Copyright Act of 1998 and the various EU member states' implementation of the EU Directive on Copyright Harmonization.

⁴ See COMPARISON OF PROPOSALS OF WIPO MEMBER STATES AND THE EUROPEAN COMMUNITY AND ITS MEMBER STATES RECEIVED BY APRIL 15, 2003, SCCR/9/5 AND COMPARISON OF PROPOSALS OF WIPO MEMBER STATES AND THE EUROPEAN COMMUNITY AND ITS MEMBER STATES RECEIVED BY SEPTEMBER 15, 2003, CORRIGENDUM PREPARED BY THE SECRETARIAT, SCCR/10/3, Paragraph 22; PROTECTION OF BROADCASTING ORGANIZATIONS; TECHNICAL BACKGROUND PAPER PREPARED BY THE SECRETARIAT, W.I.P.O. SCCR/7/8, Paragraph 19.

distribution and flow of uncopyrighted information and works that are in the public domain. Since Article 16 would require signatories to provide legal sanctions for circumventing technological measures on broadcasts, cable transmissions and webcasts, for any reason, the proposed treaty does not leave signatories any flexibility to provide exceptions to safeguard access to uncopyrightable and public domain material in their national implementation.

5. Alternative V Would Impair Research and Ban General-Purpose Computers

Article 16(2) of Alternative V of the proposed treaty is particularly sweeping in scope. It would effectively ban general-purpose computers and create a strict liability offense for consumers. Each of the provisions in Article 16(2) is likely to hinder scientific research, particularly in the areas of computer and network security and cryptanalysis. Taken together, they are likely to stifle technological innovation in the development of a broad range of new broadcast technologies and home networking equipment. For these reasons, EFF strongly supports Alternative W in Article 16, which would not require adoption of Article 16(2).

Article 16(2) goes further than Article 16(1) by creating a specific ban on three things.

1. the act of decrypting an encrypted program-carrying signal (Article 16(2)(i));
2. receiving and distributing a decrypted previously-encrypted program-carrying signal that has been decrypted without the express authorization of the broadcaster (Article 16(2)(ii)); and
3. the manufacture, importation, sale or other act that makes available a system or device that is capable of decrypting or helping to decrypt an encrypted program-carrying signal (Article 16(2)(iii)).

Article 16(2)(i) is broader than similarly directed bans in national law in two ways.

- (1) There are no exceptions for decryption for authorized recipients or for legitimate purposes that are often permitted under the parallel national satellite protection laws.
- (2) It creates a strict liability offense, because it does not require any knowledge of or intent to decrypt.

As a result, a consumer whose equipment decrypts a signal without the authorization of a broadcaster would be liable even if she had no knowledge of the device's action. This will be a problem for anyone in possession of a device that predates national implementations of this provision: old, previously lawful equipment may well decrypt and display signals that new equipment keeps locked up. That includes software decoders running on general purpose personal computers.

Article 16(2)(ii) would require signatories to impose extensive technology mandates for device design. It requires that any device that receives an encrypted signal will have to

hunt for and respond to encryption. Article 16(1) implicitly requires this for all technologies; Article 16(2)(ii) makes it explicit for encrypted signal receivers.

Under this provision, national manufacturers and distributors of devices capable of receiving encrypted signals will be required to redesign all existing signal reception devices to detect and respond to encrypted content. These types of technology mandates will have a negative impact on technological innovation and competition, for the reasons noted above. In addition, they are likely to restrict or preclude activities that are lawful and serve the public interest – such as non-commercial, private uses of recorded content by consumers, archivists and educators.

Finally, Article 16(2)(iii) creates an even more far-reaching restriction on anyone who participates in the manufacture or distribution of devices and systems that are capable of decryption or assisting in decryption of encrypted signals.

This provision is drafted extremely broadly. It not only bans the manufacture and sale of general purpose computers because they are capable of decryption or assisting in the decryption of encrypted signals, but it also forbids computer scientists from publishing academic papers that describe techniques for decryption or exploring weaknesses in particular encryption systems and protocols for broadcast signals.

Publication of vulnerabilities in security systems is widely understood to be the only method for improving computer security⁵. A similar ban on the distribution of devices and technologies that can circumvent rightsholders' technological measures in U.S. law has significantly curtailed legitimate scientific research and publication. In recognition of this, the U.S. Congress is currently considering two legislative proposals to amend this provision to allow for scientific research. Article 16(2)(iii) is likely similarly affect legitimate scientific research and publication. Accordingly, EFF supports adoption of Alternative W.

The Electronic Frontier Foundation would be pleased to provide any further information in relation to these matters that would be helpful to W.I.P.O. delegates and the SCCR Secretariat.

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⁵ Bruce Schneier, *SECRETS AND LIES: THE MYTH OF SECURITY IN THE DIGITAL WORLD*, (John Wiley & Sons, 1998), Chapter 7.