

July 19, 2004

FILED ELECTRONICALLY

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street SW, Room TW-A325
Washington, DC 20554

RE: *Ex Parte* Presentation in MB Docket No. 04-63

Dear Ms. Dortch:

On July 19, 2004, Mike Godwin, Nathan Mitchler, and Jef Pearlman of Public Knowledge met with Stacy Fuller, Advisor for Media Issues, and Matt Benz, Legal Intern for Commissioner Kathleen Q. Abernathy.

The presentation followed our comments regarding Digital Output Protection Technologies and Recording Methods Certifications filed in the above referenced docket. We also discussed the matter of proximity control and distributed the document attached to this filing.

In accordance with Section 1.1206(b), 47 C.F.R. § 1.1206, this letter is being filed electronically with your office today.

Respectfully Submitted,



Nathan Mitchler
Intellectual Property Counsel

Time-To-Live (TTL) based proximity controls are ineffective. They are easily circumvented by both free and commercial tunneling software, including Virtual Private Networking (VPN) software used by many people to access work computers from home. Anyone who went through the trouble of purchasing a pair of TiVo-supported devices, TiVo service contracts, and high-end network connections would be able to circumvent TTL restrictions without difficulty. Further, TTL-based restrictions place unnecessary constraints on how people are allowed to construct their in-home networks.

Round-Trip-Time (RTT) based restrictions are unreliable. Network delays are unpredictable and are affected by outside factors, including traffic levels, radio interference in the home, and internal network layout. Choosing a particular time period to limit signals to will inevitably result in disgruntled end-users whose legitimately obtained devices and content are unusable because the first packets sent across the network happened to be delayed. (For instance, RTT between an Ethernet-connected laptop and our network printer on an all-wired network is consistently above 7 ms.) In addition, a fixed time limit locks the restrictions in to the current state of home networks and broadband technologies, which will inevitably change in unpredictable ways. Finally, RTT-based restrictions would amount to a technological mandate on the performance of new devices, which would have to encrypt, decrypt, and process data within in an externally imposed time limit, possibly at great cost.

Live redistribution of geographically restricted HD content is currently impossible. A 3-hour game would take over two days to transfer with an expensive (and often-unavailable) 1 megabit-per-second broadband connection. Non-live redistribution would be far slower and more costly than obtaining the video legitimately. Live distribution would still be difficult even if we assume far faster broadband connections, because HD content is itself distributed live at approximately 14-18 megabits per second (more likely 18 megabits per second because of 1080 format).

TiVo's TiVoGuard is upgradeable. In the event that it were determined, despite the points above, that TiVo's content-protection system were somehow a cause of "indiscriminate redistribution" of protected content over the Internet, the Commission would not be required to force TiVo owners to replace their equipment. Instead, a new regulation could require that TiVo upgrade its software-based protection scheme online — a system that is already in place today. (The same is also true for Windows Media platform content protection and any other software-based content-protection scheme.)

Public Knowledge believes consumer interests are best served if all protection technologies submitted under the broadcast-flag regulation are admitted / certified.