

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Broadband Industry Practices)	WC Docket No. 07-52
)	
)	

To the Commission:

Comments from Nickolaus E. Leggett

I am one of the original petitioners for the establishment of the Low Power FM (LPFM) radio broadcasting service (RM-9208 July 7, 1997 subsequently included in MM Docket 99-25). I am also a certified electronics technician (ISCET and NARTE) and an Extra Class amateur radio operator (call sign N3NL). I hold an FCC General Radiotelephone Operator License with a Ship Radar Endorsement. I am an inventor holding three U.S. Patents. My latest patent is a wireless bus for digital devices and computers (U.S. Patent # 6,771,935). I have a Master of Arts degree in Political Science from the Johns Hopkins University. I am also one of the petitioners in the recent docket to establish a low power radio service on the AM broadcast band (RM-11287).

Petition from Vuze, Inc.

My comments are directed at the petition from Vuze, Inc. of Palo Alto, California that was filed with the Commission on November 14, 2007. The Commission published a public notice on January 14, 2008 calling for public

comments on the Vuze petition. The comments are due on February 13, 2008.

Sabotage of Peer-to-Peer Network Communications

Vuze has written a very interesting petition that claims that a major network provider is sabotaging peer-to-peer (torrent mode) network communications. This petition has attracted my attention from both a technical standpoint and a political science standpoint.

I cannot offer any evidence about the claimed sabotage. However, I can state that any such sabotage would have major social and political consequences for America. This is clearly a component of the overall issue of network neutrality. Should network providers be allowed to restrict or block network users from accessing a network? Should network providers be allowed to bias their service for and against certain users or types of communication?

The New National Town Square

The Internet has become America's new "town square" where our community discusses issues and where trade occurs. The Internet has become essential for the functioning of our economic, social, and political systems. Inhibiting the access of citizens to the Internet would have negative consequences for both the functioning of our basic democracy and the functioning of our economy.

Video Communications by United States Citizens

Many of our citizens are interested in producing and publishing their own video material. In many ways, video is the dominant creative and communication mode for this era. If the producers of these videos are not allowed to distribute their videos on the Internet, the following consequences will occur:

1. The producers' Constitutional rights of free speech will be negatively impacted.
2. The producers' right to access the national economy will be impacted.
3. The viewers' rights to receive the videos will be blocked or inhibited.
4. The issue of network neutrality will probably be litigated.
5. The legitimacy of the private sector economy and the legitimacy of the United States government will decline.
6. New political organizations, philosophies, and parties will arise in response to the loss of opportunities for Internet communications and marketing. Many of these will be hostile to the existing powers-that-be.

Similarly, the mechanism used to sabotage or limit video file transfers would also sabotage or limit two-way video communications over the Internet. Two-way or conference call video is an appealing communications medium that is likely to grow over time if it is not sabotaged.

Non-video Peer-to-Peer Communications

Peer-to-Peer communications can be used for non-video interactions as well. With the growth of adaptive software and artificial intelligence (AI) systems one can easily see that large collective groups of computers will be harnessed to accomplish specific goals. Already early versions of this can be seen for the computation of scientific data such as the SETI@home system that uses a large set of individual personal computers to digest radio telescope data. An advanced peer-to-peer system could do this type of work at a high level of efficiency that could adapt in real time to changing circumstances. For example, a swarm of computers could be set up to process weather data from millions of individually-owned sensors around the Nation and generate a continuously updated model of expected weather events. Another swarm of computers could monitor real-time sales data for numerous retail vendors to create a moment-by-moment view of sales patterns throughout the Nation. Still another swarm of computers could process holographic picture transmissions. Computer networks could manage themselves using peer-to-peer interactions between artificial intelligence software modules on numerous individual computers.

Is the Commission willing to allow this whole new area of technological development to be blocked by the actions of specific corporations?

Technological Methods for Sabotage

The petition hints at the methods used for the sabotage of peer-to-peer

communications, but does not spell out the details of the sabotage or the methods used to overcome the sabotage. The Commission and the public need to know the technical details of the sabotage. This suggests that a Notice of Inquire (NOI) would be useful to obtain the technical details of sabotage mechanisms. There is no way that the Commission can advance on this petition without being aware of the technological details involved. Similarly, the public needs to know the technical details so they can judge this situation.

Political Symbols of Freedom

In the past, the printing press and the soap box orator were common symbols of freedom. Today, the Internet itself is a primary symbol of freedom. If the ordinary citizen is blocked or inhibited in his use of the Internet, America will be seen as a less free nation moving down a dark road to a corporate based tyranny. If we cannot speak out freely in this core environment of the Internet, what freedom do we have left? Are we citizens here just to be consumers? Or are we producers of ideas and products and managers of our Nation?

We are at a fundamental crossroads in American history. The conventional broadcast media have already been taken over by media consolidation. Will the Internet be next leaving no opportunities for individuals and small organizations?

Requested Action

Please issue a Notice of Inquiry requesting detailed comments on the specific technologies of the claimed sabotage as well as social, political, and legal commentary on the consequences of the loss of network neutrality. This NOI should also request suggestions for specific regulations that could preserve network neutrality.

Respectfully submitted,

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January 31, 2008