Dear Commissioners,

As a longtime customer of the Comcast Corporation (CMCSA) I feel it is necessary for me to provide you with my views and opinions regarding their use of throttling bandwidth for point to point (P2P) users that access their network.

File sharing is a gray area with regards to the law. It can be used for not only illegal purposes, such as the sharing of copyrighted material like music and movies, but for sharing of information that is perfectly legal such as software updates, free operating system distribution, free movie and movie preview distribution plus free music distribution. I will cite examples of each accordingly.

The most widely publicized use of P2P file sharing is illegal music and movie distribution. As this review for comment does not touch upon the legal issues surrounding the data being shared I shall focus my attentions to those legal methods that are affected.

Blizzard Entertainment, a wholly owned subsidiary of Vivendi Games (Euronext: VIV), uses the Bittorrent P2P file sharing protocol to distribute updates and patches to the players of the very popular Massively Multiplayer Online Role Playing Game (MMORPG) World of Warcraft. If their data is interrupted for any reason, even for a short time, then thousands, perhaps even millions, of users will be unable to play their game. This will directly cut into their profit margin.

The Linux operating system is a freely available alternative to both Microsoft Windows and the Apple Mac OS. As the Linux operating system is free they rely solely on donations of both time and money from people across the planet. That money, however, is not unlimited. To reduce the high cost of bandwidth they use the Bittorrent protocol for much of their software distribution. Interrupting their distribution channel would only benefit Microsoft, an already proven monopoly. To help ensure competition I feel that Bittorrent should not be interrupted.

To give but one example of free video entertainment you may want to look at the TV Guide 2007 Online Video Award winner Star Trek New Voyages. They are a very high quality non-profit production that was able to beat out contenders such as the 4400 and Battlestar Galactica. Their preferred method of distribution is bittorrent as they have a very limited bandwidth.

Many movies distribute their previews via bittorrent. This would damage not only their advertising structure but limit the consumer to one method of retrieval.

To see that Bittorrent and the movie industry, music industry and gaming industry are working TOGETHER and that they are seeking to create a strategic partnership please view the following URL for more information:

http://www.bittorrent.com/about/press/bittorrent-inc-launches-the-bittorrent-entertainment-network

Of course now that you know that Bittorrent is a popular, legal, and economically feasible method of content distribution let me explain a little bit of how it works.

Let us say that the makers of Star Trek New Voyages come out with a new episode. They have a few options at their disposal. One of them is to create a simple link to a file and have everyone who is interested in the file download it from one single location. The downside to

this is that the single location will be paying a fortune to accommodate the high volumes of traffic.

The other option is Bittorrent. By having people connect to what is referred to as a "tracker" they can find out who else is downloading the same file and start taking pieces from multiple different users. Essentially everyone is sharing the same file a little at a time to a lot of different people. While that sounds slow the real world execution can be amazingly fast.

Unfortunately for the consumer there is a problem and it's name is Sandvine.

When I make a connection to a computer I am able to transfer data either to or from it. One connection is used for receiving data and another is used for sending data.

When it is time for the connection to end it can naturally time out after a given period or can be manually reset using a "reset packet," commonly referred to as an RST packet. A complete breakdown of how a connection is terminated by an RST packet please consult the following link:

http://www.faqs.org/docs/iptables/tcpconnections.html

The RST packet is used to refuse and close a connection. To give a real world example let me use a telephone system.

I place a call to my friend on a land line telephone. When we are finished we hang up and can hear a dial tone if we pick up the phone again in about 10 minutes.

If we were having a problem communicating I could send him a dial tone to have him dial me again in about 10 minutes.

Now, if I were the phone company and didn't want people to use my service very much or to talk about certain topics I could insert a dial tone to both parties. Each would think that there was a problem with the connection and try again in about 10 minutes.

This seems to be Comcast's version of "delayed" communications.

I believe that Comcast Communications is using an application called Sandvine to insert a proverbial "dial tone" into a data stream. There are security measures put in place to prevent a hacker from sneaking data into a data stream, but as Comcast can monitor those streams they can perfectly forge an RST packet that will be interpreted as coming from the other party.

Were the phone company using such tactics then I am sure there would be public outcry as it would be very obvious to everyone that it were happening. Unfortunately it is impossible to tell on the internet if an RST packet was sent from the other party or not.

But this isn't just affecting customers of Comcast. It is also affecting any Internet user that needs to connect to a Comcast user. The RST packet is being sent to all parties.

Personally I am waiting for the first lawsuit from a foreign Internet Service Provider (ISP) to happen. What Comcast appears to be doing can be construed by some as illegal.

I feel that Comcast's forging of packets and disruption of service are at a minimum unreasonable at possibly illegal.

If there is any way that I may be of further assistance please feel free to contact me.