UNITED STATES GOVERNMENT

memorandum

ORIGINAL

EX PARTE OR LATE FILED

FILED/ACCEPTED

FEB 2010

Federal Communications Commission

DATE: February 12, 2010

TO: Marlene Dortch, Secretary
Office of the Secretary

CC: Jonathan Baker, Mark Bykowsky, William Sharkey

FROM: Chuck Needy, Senior Economist CWN
Office of Strategic Planning & Policy Analysis

SUBJECT: Ex Parte Submission in Docket 09-191

I am submitting this memorandum and the attached email message for inclusion as an ex parte submission in Docket 09-191, In the Matter of Preserving the Open Internet Broadband Industry Practices. On January 7, 2010, four economists in the Office of Strategic Planning and Policy Analysis met with Dr. E. Glen Weyl, a member of the Harvard Society of Fellows and Toulouse School of Economics. The four economists are Jonathan Baker (FCC Chief Economist), Mark Bykowsky, William Sharkey, and me.

The purpose of the meeting was to discuss Dr. Weyl's theoretical paper, "A Price Theory of Multi-Sided Platforms," forthcoming in the *American Economic Review* and now available online at the Social Science Research Network (ssrn.com). That paper develops a general theory of monopoly pricing of networks to help predict the effect of mergers and price regulation.

The attachment is an email exchange between Dr. Weyl and me occurring on January 29 and February 1 of 2010. It contains a three-page discussion of the implications of applying Dr. Weyl's theoretical model to the regulated Broadband Internet Industry.

No. of Copies rec'd 0
List ABCDE

Chuck Needy

From: Glen Weyl [weyl@fas.harvard.edu]
Sent: Monday, February 01, 2010 1:22 PM
To: Chuck Needy
Cc: Mark Bykowsky; William Sharkey; Jonathan Baker
Subject: Re: Question about Applying Two-Sided Market to ISPs

Chuck,
As I mentioned, I am happy to discuss this all more by email or phone as is useful. I'll be down in DC in about a month an a half, as well, and would be happy to drop by again.

Best,
Glen
On Feb 1, 2010, at 12:59 PM, Chuck Needy wrote:

> **Glen, thanks so much for your prompt and well reasoned response to my question. We are now thinking about the implications of your response. -- Chuck**

*** Non-Public: For Internal Use Only ***

From: Glen Weyl [mailto:weyl@fas.harvard.edu]
Sent: Friday, January 29, 2010 5:59 PM
To: Chuck Needy
Cc: Jonathan Baker; Mark Bykowsky; William Sharkey; Howard Shelanski
Subject: Re: Question about Applying Two-Sided Market to ISPs

Dear Chuck,
Thank you for your interesting email. I don't know how much of a help I can be in answering your query as I really have no empirical data to support any assertion I make, but perhaps I can provide a little bit of conceptual clarity about what elasticities are likely to matter, even if I don't know their magnitudes.

It seems to me that your concern is that content providers may have insufficient incentive to invest it greater quality if they expect to be held up, after this investment, by an ISP seeking to extract the surplus thereby created. I would agree this is a significant concern, but I think there are two ways to avoid its coming to the fore. One is to prevent the ISPs charging the content providers; a second is to put a "quantity floor" on the content providers, allowing them to charge but requiring them, regardless of whether content providers pay, to have a certain fraction of content available at non-discriminatory speeds. The best way to implement the second approach is most likely an idea Howard Shelanski, who I copy on this email, had of having the ISPs make classes of websites in an incentive compatible way that I will allow him to describe better than I could. The advantage of this approach is that sufficiently stringent quantity floors could place arbitrarily more power into the content providers hands, allowing them to bargain down prices. However the marginal incentives for the ISPs to sign up users would not be diminished by this as, on the margin, they would still gain as much in terms of a

higher price from content providers for each additional user they sign up. Price caps, on the other hand, would systematically undermine incentives to sign up subscribers.

A second issue that your question raises is whether we should be more focused on ensuring content quality is kept up, or ensuring access is expanded (the trade off between consumer surplus from subscription and from quality that you described). There I think there are two crucial issues:
1. How much market power do the ISPs have over subscribers (ie how much undersubscription is there from a social perspective with no regulation due to marginal revenue falling below price) v. over content providers (ie how much would quality be reduced below its socially optimal level due to marginal revenue< price)?
2. How much of the externalities to subscribers of better quality does the ISP fail to internalize because it cannot price discriminate among subscribers (how large is the Spence distortion from subscribers to providers) and how much of the externalities to providers of subscribers visiting their website does the ISP fail to internalize because it could not charge fully discriminatory prices to websites (how large is the Spence distortion in the other direction)?
Together these two forces will determine which side the optimal quantity regulations should focus more on. Of course ideally they would focus on both in Ramsey proportions, but in practice this may be difficult to achieve.
I don't know how large these things are in relative terms. But I do think it would be feasible with a little hard work to get some sense of them.
Does this help in answering your question at all? I am happy to continue to discuss all of this at as much length, and in whatever format, that would be most helpful.

Best,
Glen

On Jan 29, 2010, at 2:48 PM, Chuck Needy wrote:

Hello, Glen. I am one of the four FCC economists you met with two weeks ago when making your white-board presentation in Jon Baker's office. When I raised a question about an application of your model this week, Jon suggested I ask you directly.

At issue is whether content providers paying for access will maintain their current quality of content. Assuming that all new access revenue is passed through to ISP broadband subscribers in rate reductions, the hope is that subscriber demand is sufficiently elastic to greatly increase the number of subscribers. That increase in "eyeballs" presumably causes content providers to enjoy an increase in advertising revenues large enough to offset their new access costs.

In this way, it is hoped that the access fees will not result in a degradation of content quality – or, if it did, that the resulting loss in consumer surplus for existing subscribers would be offset by the added surplus of new subscribers.

My question, then, is do you have any reason to believe that subscriber demand is sufficiently elastic to prevent the degradation of content quality? The best figures for 2010 indicate that 70% of households already have cable or wireline broadband (Nov 2009 Broadband Report prepared at FCC's request by Columbia Institute for Tele-Information).

As to the households without broadband, only 19% of them cite price as a reason for not having it, 50% say they are not interested, 17% cite unavailability, and 13% say they are unable to use it (Pew Research survey of 2,253 adults, June 2009).

Hence, no matter how low the price, the broadband adoption rate of 70% likely cannot exceed 82%, the number of households known to have a computer. As to the difference between those two figures – i.e., the 12% which is dialup -- only a third of these subscribers cite price as a reason for not switching to broadband according to Pew Research. This suggests that a large price reduction would entice an additional 4% of households, at most, to switch to broadband.

If some of the 19% without Internet actually do have computers, perhaps another 2% would be added. Even then it is unclear, however, that this additional 6% of households (i.e., 4% + 2%) would produce eyeballs of much interest to advertisers, given Pew's description of them as lower income folks and senior citizens. So the question, again, is do you have any reason to believe that the content suppliers will enjoy an increase in advertising revenues that offset the new access fees, preventing a degradation of content quality? -- Chuck

*** Non-Public: For Internal Use Only ***