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July 14, 2017

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

Re: *Restoring Internet Freedom*, WC Docket No. 17-108

Dear Ms. Dortch,

I write to you as the CEO of Libiquity, a small business that develops software and firmware systems and sells personal computers, all designed to make a positive and ethical impact on society. Libiquity is one of millions of small businesses in the US that develop and provide products and services that customers and users want but that larger and wealthier companies don't offer. Like many of today's small businesses, Libiquity owes its very existence to a free and open Internet and thrives thanks to its ability to deliver its message to the public on a fair playing field and with a voice as loud as its competitors, no matter their size.

I write to you as a small business executive concerned about the future of the free and open Internet, the future of net neutrality rules, and the text and proceeding of NPRM FCC 17-60, rather aptly named the *Destroying Internet Freedom NPRM* by Commissioner Clyburn in his well-reasoned dissenting statement. This NPRM, and the practices by ISPs that it will allow to resume, threatens the Internet's equalizing economic opportunity and the voices of the collective drivers of our country's economic growth.

And I write to you as a technologist and Internet user with different analyses of the classification of Internet access service as well as vastly contrasting views and experiences of the state of the Internet before and after the 2015 *Title II Order* than are presented in the NPRM and Chairman Pai's statement. I find the NPRM's descriptions of a flourishing free and open Internet under light-touch regulations and a decline under net neutrality to be reversed and many of the NPRM's various assertions to be incorrect, sometimes absurd, and sometimes contradictory and confused. Thus, in this letter, I would like to provide comments on some of the NPRM's analyses.

I will first address the suggestions that ISPs appear to offer information services and not telecommunications services. Paragraph 27 states that Internet users are able to "transform

and process information online." While I agree with that statement *per se*, I don't believe it yields the same conclusion as reached in the NPRM. ISPs themselves don't provide the "capability" to perform these functions. They facilitate only the "transmission ... of information" between users and unaffiliated third parties that offer users the "capability" to "transform and process information".

Paragraph 29 absurdly disregards abstraction and presents an argument whose logic can be extended to reach ridiculous conclusions. It cherry-picks from Report to Congress FCC 98-67, the *Stevens Report*, a definition of the Internet as a network that "enables users ... to access information with no knowledge of the physical location of the server where that information resides." This definition and the nature of network routing protocols and algorithms are extrapolated to contradict the classification of broadband Internet as "the transmission, between or among points specified by the user."

If "telecommunications" services require users to specify the exact physical location of the points between or among which information is transmitted, then telephone services cannot possibly be telecommunications services either, as an NANP number, like an IP address, does not necessarily specify a physical location. When calling an NANP number, a user does not know or care which physical telephone in which building will receive the call and ring, whether the requested party has their calls forwarded to another telephone or even a different type of service such as Internet telephony, or whether the requested party has their calls routed through a PBX with an interactive voice response system. In any of these cases, the telephone service provider has done its job of transmitting information, as long as the provider does not itself block, redirect, or otherwise "change ... the form or content of the information as sent and received."

Likewise, an Internet user does not know or care in which rack in which cabinet in which cage in which data center a server with a particular IP address is stored. Points in network routes, in either telephone or computer networks, are implementation details of the network, not points that a user must specify in a "telecommunications" network. Other paragraphs of the NPRM cite other basic implementation details of the Internet, such as dual-stack IP addressing or IPv6 traffic tunneling (it's not clear which is meant), as weak reasons that Internet access service cannot be a telecommunications service.

Paragraph 28 notes that ISP customers often use software and services – including Web browsers, news Web sites, and e-mail services – provided by third parties unaffiliated with the ISPs. But this analysis is not strictly relevant, nor is the conclusion correct. Internet access service *per se* is not capable of "generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information." Additional information services that are included with Internet access service are capable of these functions, not the Internet access service itself.

Paragraph 36 raises an explanation in the *Title II Order* that Internet access service is often offered with complementary services and extra features included. The paragraph then seems to miss the point of the *Title II Order*'s claim, making odd remarks that ISPs' marketing

has for a long time mentioned connection speeds and has not decidedly changed in recent decades. I believe the point that the *Title II Order* intended to make was that basic Internet access service is a telecommunications service and any complementary services and extra features are to be considered separately. Therefore, Internet users do indeed want a fast and reliable "transmission ... of information" in their Internet access service, along with any complementary services and extra features that may be included.

This analysis informs consideration of paragraph 40, which notes that the Commission has previously considered telecommunications services and information services as mutually exclusive types of service and that the *Title II Order* found that Internet access service was a telecommunications service and not an information service. I agree in part that the two types of service are mutually exclusive, and I agree with the current classification of Internet access service as a telecommunications service. But I believe, as explained above, that Internet access service should be considered separately from complementary services and extra features that may be included.

Paragraph 39 asks if the Commission's historical information service classification and "regulatory certainty" fostered additional investment or innovative business models. The NPRM seems to answer its own question in paragraphs 46 and 49, apparently asserting that restoring information service classification would result in "faster closing of the digital divide for rural and low-income" Internet users, increased investment, more competition, higher speeds, and lower prices.

Similar praise for the era of light-touch regulation between 1996 and 2015 is offered by paragraphs 5 and 23 and Chairman Pai's statement. The NPRM and Pai's statement describe huge infrastructure investments and improved Internet access services at lower prices between the 1996 Telecommunications Act and the 2015 *Title II Order.* Pai recounts the rationale of the late 1990s for light-touch regulation of Internet access service. But at that time, the most vertically integrated ISP was AOL. The Internet today is very different. ISPs now provide their own news and entertainment media outlets, Web search engines, payment services, tethering applications, etc.

In fact, the NPRM and the Chairman seem to have an unrealistically positive impression of the pre-2015 Internet. Internet access services didn't improve to allow users to "enjoy all that the Internet had to offer." They became more degraded and less neutral, free, and open. Most residential ISPs blocked incoming traffic on at least some ports to prevent users from running home servers. Many ISPs began blocking or redirecting requests to third-party services, without the users' permission and often without their knowledge.

The claims regarding infrastructure investments and options also appear to be false. The digital divide in the US widened faster than ever between 1996 and 2015. Huge parts of the country saw little to no infrastructure investment and few, if even any, Internet access service options.

One major example in our state of ISPs' failure to invest in infrastructure despite the light-touch regulatory framework celebrated by this NPRM is the Opportunity New Jersey plan. The New Jersey Bell Telephone Company, now Verizon New Jersey, petitioned the State of New Jersey's Board of Regulatory Commissioners to approve a regulatory plan with a financial incentive that would enable NJ Bell to replace its entire PSTN with a statewide fiber-optic broadband network by 2010, well in advance of the projected 2030 completion date under business as usual. Over the next twenty years, an estimated $20 billion in taxpayer-funded incentives funneled through the company and into lobbying funds, executive salaries, and dividends to its parent company, with no accelerated infrastructure investment. After years of paying for fiber-optic cable, New Jerseyans in most of the state have yet to see any fiber at their curbs, despite Verizon NJ's filings claiming that they met their promise. The company has continued to refuse to upgrade or even repair its network. And New Jersey is far from alone – scams like this have happened all across the country.

We are among those who still have no available fiber-optic broadband service. And as an anecdote, we actually saw our Internet access service options decline before 2015. Libiquity, in its years of research and development before active trading, relied on an independent regional DSL ISP with neutral, business-friendly terms-of-service and Internet access services. In April, 2014 our ISP, under its new CEO, announced the divestiture of its Internet access services to focus on its data center business. This business decision left our area with exactly one provider of neutral, business-friendly Internet access – another independent regional ISP. Libiquity now has Internet access service with a speed not much higher than DSL's. This is just one anecdote of the struggles of businesses in underserved rural areas since the 1996 Act. Many areas have no free and open Internet access at all. I contend that reversing telecommunications service classification would not increase investment or competition, as it apparently did not in the past, even with billions of taxpayer dollars.

Paragraph 46 asks how Title II regulation has impacted investment and costs. Anecdotally again, the increased regulation has not so far caused any further decline in options or degradation in service features in our area. As Commissioner Clyburn cites, I believe it's too soon to accurately understand the effects of increased regulation on investment. But net neutrality rules do have positive impacts on users and their online experiences. And they can cause more Internet access services to support use by businesses in areas with few options.

Paragraphs 39 and 50 seek comment on harms resulting from light-touch regulation. North Carolina ISP Madison River Communications blocked the VoIP service Vonage in 2005. Comcast blocked BitTorrent seeding between around 2007 to 2010. AT&T has blocked Skype, FaceTime, Google Voice, and other VoIP and video calling services. In 2010 and 2011, numerous ISPs were found to be redirecting search queries to either their own or another party's search engine and results. Many ISPs' DNS servers return addresses for advertising Web sites instead of "NXDOMAIN" responses when a user looks up a domain name that doesn't exist, which can cause numerous security, performance, reliability, and other issues. AT&T, Sprint, and Verizon blocked the Google Wallet mobile payment system from 2011 to 2013. In 2012, Verizon Wireless blocked users from using third-party tethering applications.

In addition, we know and can further predict what harms will result from any future light-touch regulation. Verizon attorney Helgi Walker affirmed to judges several times in *Verizon v. FCC* in 2013 that her client plans to engage in paid prioritization. In 2011, MetroPCS announced plans to block streaming video from all services except YouTube.

It's distressingly easy to speculate a little further with what we know of the largest ISPs and imagine a "digital dystopia," to borrow Chairman Pai's phrase. As Verizon's attorney has indicated, ISPs intend to extract money from both points of a transmission: their own customers at one point and online service operators – who already pay their own ISPs – at the other point. This is digital racketeering, with extortion of online service operators and retribution against those that don't pay to play. In addition to degrading Internet users' services, schemes such as blocking, throttling, and paid prioritization threaten the voices and very existence of the backbone of the US economy – small businesses.

And all of the vertical integration of today's ISPs suggests additional potential harms. Many ISPs have already begun blocking competing services, and if Title II regulation is reversed, it seems like only a matter of time until other types of competing services will be blocked, including news and entertainment media outlets. Imagine Comcast and – if the Time Warner acquisition is approved – AT&T blocking Fox News's Web site in favor of their news network Web sites. Or imagine Verizon blocking Breitbart in favor of its subsidiaries HuffPost and Yahoo! News.

Some have speculated that regulating broadband Internet like cable television will result in Internet access services that are more like cable television services. Curated *à la carte* "packages" of online services could be offered to customers, with additional and opaque fees. Online services without distribution agreements with an ISP would simply be unavailable to that ISP's customers. Paragraph 79 cites this dystopian possibility and the *United States Telecom Association v. FCC* ruling, which suggests that Title II classification, while necessary, may not be sufficient to protect against the most eggregious blocking by ISPs.

Paragraph 33 suggests that Title II appears to be a poor fit for Internet access service, citing the *Title II Order*'s forbearance of numerous regulations. I am inclined to agree with this analysis based on such forbearance and the aforementioned D.C. Circuit ruling, but not with the conclusion that Title II is outright unsuitable. The optimal solution, as recommended by Chairman Pai during the *Title II Order* proceeding, would be to seek from Congress amendments to the Telecommunications Act that offer a legally sound framework for net neutrality rules but without the forborne regulations. Many other observers share this view, and Congress seems receptive to the idea. Incidentally, Senator Ron Wyden, whom Commissioner Pai cites as supporting light-touch regulation in 1998, is now campaigning against this NPRM. But unless and until Congress offers such legislative guidance, the Title II classification should remain and this NPRM should be shelved.

Instead this NPRM is apparently being rushed through, with economic analyses being left as exercises for the commenters and technical committees being outsourced to the media and political action organizations. The campaign for net neutrality that resulted in the *Title II*

Order and continues to fill technology news Web sites and break petition records has been a long grassroots battle. The Commission has worked on this matter since 2008 and made multiple attempts, including the *Open Internet Order* and *Title II Order*, to more effectively regulate Internet access service. But this NPRM seeks to reverse, with the usual haste of a repeal effort, the progress that has been made to protect Internet users.

Chairman Pai's stated commitment to data sounds honorable, but it is unfortunately framed as merely an alternative to public opinion reduced to "140-character commentary." More concerning is Commissioner O'Rielly's discounting of millions of comment filings as "a Dancing with the Stars contest," though it is important to detect and filter out fraudulently submitted comments. A recent public poll conducted by Civis Analytics on behalf of Freedman Consulting, LLC shows that 77% of Americans (73% of Republicans, 80% of Democrats, and 76% of independents) support keeping existing net neutrality regulation and 88% believe Internet access service meets the definition of a telecommunications service. 83% (87% of Democrats and 80% of Republicans) generally support *ex ante* regulation, but 88% believe that large ISPs "have more influence on lawmakers than ordinary American [I]nternet users do."

It would seem that the Commission under its current leadership is abdicating its responsibilities to regulate telecommunications. An example of this is the Commission's failure to review AT&T's acquisition of Time Warner. This NPRM is simply more of the same. As noted by Commissioner Clyburn, this is a Commission, tied to the special interests it exists to regulate, tearing itself down one step at a time.

I will be forwarding this comment letter to my and Libiquity's Congressional delegation – Representative Josh Gottheimer, Senator Robert Menendez, and Senator Cory Booker – to request their support against this NPRM and consideration of legislative guidance on more suitable legal authority for net neutrality rules in the Telecommunications Act.

Finally, I would like to thank the Secretary, the Wireline Competition Bureau, and the Commision for handling my comment filing, for accepting it into the record, and for considering it – among the millions of other comments – during this proceeding.

Sincerely,

Patrick McDermott

Patrick McDermott
CEO, Libiquity LLC