

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

In the Matter of )  
 )  
Restoring Internet Freedom ) WC Docket No. 17-108

**Friends of Community Media Comment in Opposition to  
Restoring Internet Freedom NPRM**

**I. INTRODUCTION**

Friends of Community Media (“FCM”) is a 501(c)(3) nonprofit organization set up to preserve and foster citizen participation in the media.<sup>1</sup> Based in Kansas City, Missouri, with members from both Kansas and Missouri, FCM works to help preserve existing community media, make existing media responsive to the public, be a media watchdog, publish new forms of citizen-based media, create public service programming, train citizens in media literacy, and encourage media outlets to meet moral and legal civic obligations.

FCM has sponsored the Grassroots Radio Conference, Progressive Media Awards, supported with a week of media awareness activities called Media4Us, conducted Communiversity classes, supported local community media and participated in media awareness activities.

Friends of Community Media created in 2007 as the merger of Friends of Community Radio and Citizens for Media Reform. Friends of Community Radio was founded in 2001 to help and protect community radio station KKFI in Kansas City retain its original purpose, and return proper administration to the station. That goal had been achieved by 2007 before the merger with Citizens for Media Reform.

FCM asks the Commission not to adapt the proposed rules in the Restoring Internet Freedom Notice of Proposed Rulemaking (“NPRM”).<sup>2</sup> The Telecommunications Act of 1996 does not support the conclusion that the operation of modern “last mile” broadband services are an “information service,” Commission precedent has been inconsistent under the Title I classification and Title II classification clarifies regulations, and the Commission does not have legal authority to classify broadband internet access service as an information service.

**II. BACKGROUND**

From 1996 to 2015, the FCC interpreted various services of Internet Access Providers and Internet Service Providers (“ISPs”) as a single aggregate service, but recognizing “that new Internet-based services are emerging, and that our application of statutory terms must take into

<sup>1</sup> Friends of Community Media website: <http://www.ourfcm.org> .

<sup>2</sup> WC Docket No. 17-108.

account such technological developments.”<sup>3</sup> An ISP at that time typically provided data storage in email services for the customer, and often internet search services, as well as the underlying broadband data transfer from edge services that form the Internet.

The technology in use for “last mile” broadband connection by the ISP to the customer in 1998 differed between traditional cable and telephone service providers of Internet service. Traditional cable service providers typically carried analog television signals in an RF medium from central switching points. Separate RF signals were superimposed for digital data transport using DOCSIS or similar technology such that a cable modem could separate the digital Internet signals from the analog television channels.<sup>4</sup> Telephone services over traditional cable was just being introduced at the end of the 1990’s.

Telephone service providers typically continued their original analog phone service (“POTS”), with an overlaid higher frequency signal that could be filtered out of the normal phone connection using a technology called “Digital Subscriber Line” (“DSL”).<sup>5</sup>

This grouping of services including the “storage” and additional computing aspects of the email service were typically bundled in the subscriber’s service package. Prior to and including 1998, the FCC interpreted all broadband suppliers services together (including the “last mile” data transport function) as “information services” for purposes of regulation.

By 2015 the technology and the problems had changed. The traditional analog broadcast signal had changed to digital television (DTV) in 2009, and digital video data became available on cable. At least in larger cities, some traditional telephone and cable systems were being converted to a fiber communication technology for portions of the local signal path, and in some instances fiber was even connected to individual subscribers.<sup>6</sup> Cable television suppliers also supplied telephone services, and telephone system suppliers like AT&T offered television services.

Many ISPs outsourced email services rather than providing the data storage and processing functions of email systems themselves. For example AT&T customers typically would have a contractually arranged Yahoo email address and data storage service for that email.

<sup>7</sup> In May of 2015 AT&T awarded a contract for email and other services to another independent

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<sup>3</sup> *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501, 11536, para. 73 (1998) (*Stevens Report*). Note 23 in WC Docket 17-108.

<sup>4</sup> DOCSIS: Data Over Cable Service Interface Specification <https://supportforums.cisco.com/document/7056/docsis> and <https://www.cablelabs.com/innovations/docsis3-1/> (last visited July 17, 2017).

<sup>5</sup> *Obscure History of DSL* <https://www.versatek.com/blog/history-of-dsl/> (last visited July 17, 2017).

<sup>6</sup> *Consumer Reports: “Fiber-Optic Providers Are Leading Choices for Internet, TV, and Telephone Service”* <http://www.consumerreports.org/media-room/press-releases/2010/01/fiberoptic-providers-are-leading-choices-for-internet-tv-and-telephone-service/> (last visited July 17, 2017).

<sup>7</sup> *Shalini Ramachandran and Douglas MacMillan, “AT&T dumps Yahoo after 15-year partnership”, Wall Street Journal, May 4, 2016,* <http://www.marketwatch.com/story/att-dumps-yahoo-after-15-year-partnership-2016-05-04> (last visited July 16, 2017).

provider, ending a 15 year partnership with Yahoo as Yahoo entered discussions with competitor Verizon for sale of the company.<sup>8</sup>

To speed the data transfer by providing data closer to final clients, Companies like Akamai and Limelight pioneered the content delivery network or CDN business to provide stored caches of large volume data. Transit and backbone suppliers like Level 3 and Cogent have entered the CDN market, offering data storage caching. Companies like Netflix contracted with CDN businesses to provide the shorter hop data storage and caching to improve their data delivery to and over the “last mile” broadband providers, providing shorter hops to internet customers in various parts of the country.<sup>9</sup>

Netflix asked the FCC to address concerns about network interconnection agreements, as data suggested that ISP providers like Comcast had been discriminating against traffic from edge services suppliers like Netflix and CDN suppliers that Netflix had contracted with to cache data storage of Netflix video files. All these technology changes highlight a difference in the way the traffic, data storage, and processing functions occur on the Internet.<sup>10</sup>

In the Protecting and Promoting the Open Internet ruling of March of 2015, the FCC reclassified the last mile transport functions of ISPs as a “telecommunications service.”<sup>11</sup> This reclassification did not apply to the data storage and processing aspects of email services (now often outsourced), nor data storage caching offered by CDN services external to the “last mile” broadband service.<sup>12</sup>

The Restoring Internet Freedom NPRM of May, 2017, to which this comment replies, would reverse that reclassification of the last mile transport function as a “telecommunications service,” changing it to an “information service.”<sup>13</sup>

### III. ARGUMENT

*a. The text and structure of the Act do not support the conclusion that broadband is an “information service.”*

The Telecommunications Act of 1996 (“Act”) recognizes many different ways that Americans communicate via technology. Although Congress did not anticipate the specific developments in technology that have occurred between 1996 and 2017, the basic structure of

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<sup>8</sup> CNN: *Yahoo loses key AT&T business*

<http://money.cnn.com/2016/05/04/technology/yahoo-att-portal/index.html> (last visited July 17, 2017).

<sup>9</sup> CNET on “Comcast vs. Netflix: Is this really about Net neutrality?”,

<https://www.cnet.com/news/comcast-vs-netflix-is-this-really-about-net-neutrality> (last visited July 17, 2017).

<sup>10</sup> *Comcast Corp. v. FCC*, 600 F.3d 642 (D.C. App. 2010).

<sup>11</sup> FCC GN Docket No. 14-28 on “Protecting and Promoting the Open Internet”,

[https://apps.fcc.gov/edocs\\_public/attachmatch/FCC-15-24A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-24A1.pdf) (last visited July 16, 2017).

<sup>12</sup>FCC GN Docket No. 14-28 (207 and following) [HELP paragraph 207--correct format ref?]

<sup>13</sup> WC Docket No. 17-108.

the act gives common sense guidance on how to adapt new technology within the existing structure of the Act.

The Telecommunications Act defines “information services” as “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications . . .”<sup>14</sup> The plain language of the statute clearly indicates that “information services” are dependant on the use of telecommunications and are not a stand alone service. “Telecommunications” is defined as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.”<sup>15</sup>

The current “last mile” broadband services, to which the Protecting and Promoting the Open Internet ruling applies, do not include the data storage and transforming, processing, nor retrieving aspect of email services, which in many cases are now handled by outsourced service providers. (They do include reliable transport computational aspects of communication so as to deliver the exact same information as supplied by the originating source.) Nor are the data storage caching operations of CDN suppliers regulated in the change. A user (or more correctly a user’s browser or application) requests data from a specified “address” (URI) and that data is delivered without change in the form or content to the user’s browser or application. (Compare to standard telephone service in which the user specifies an address--telephone number--to and from which audio data is transferred. However that data may be modified by signal processing and data compression, a form of computation, though normally that does not substantively change the information content unless data corruption makes the audio unintelligible.)

Just as an example, an HTTP browser requests data from a website outside of the ISP’s last mile network, and according to that protocol “...only presumes a reliable transport; any protocol that provides such guarantees can be used.”<sup>16</sup>

The modern technology of the “last mile” broadband service now conforms much more closely to the “telecommunications service” definition, and external services (whether supplied by the ISP, outsourced, or supplied by another “edge” service) provide all of the storing, transforming, processing, retrieving aspects that affect the Internet consumer.

***b. Commission precedent has been inconsistent under the Title I classification and Title II classification clarifies regulations.***

In 2007 Internet experts documented how Comcast was blocking certain uses of the Internet.<sup>17</sup> Comcast was clearly violating the first two of Powell’s four Internet freedoms.

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<sup>14</sup> 47 U.S.C.S. § 153(24).

<sup>15</sup> *Id.* at § 153(50).

<sup>16</sup> Quizlet, “Infrastructure 2110”, <https://quizlet.com/5464595/infrastructure-2110-flash-cards/> (last visited July 16, 2017).

<sup>17</sup> Ernesto, “Comcast Throttles BitTorrent Traffic, Seeding Impossible”, *TF*, Aug. 17, 2007, <https://torrentfreak.com/comcast-throttles-bittorrent-traffic-seeding-impossible/>.

To try to force Comcast to stop censoring their users' Internet usage, the FCC issued the 2008 Comcast-BitTorrent Order.<sup>18</sup> Comcast sued. In *Comcast Corp. v. FCC*, the U.S. Court of Appeals for D.C. ruled that the FCC did not have the authority to force an "information service" to stop censoring their customers' Internet usage.<sup>19</sup> The FCC responded by adopting the 2010 *Open Internet Order*, which was again vacated by the D.C. Circuit, because the FCC was trying to regulate "information services" as "common carriers," without designating them as such.

Finally, in 2015, the FCC adopted the *Title II Order*, which reclassified the major telecoms as "telecommunication services." In *United States Telecom Ass'n v. FCC* (2016), the D.C. Circuit sided with the FCC, contrary to the predictions of then-Commissioner Pai.<sup>20</sup>

The primary point of recounting this history here is to note that the courts twice told the FCC that they could not force an "information service" to stop censoring its customers' Internet usage. In 2016, the court affirmed that the FCC could, however, reclassify the major telecoms as "telecommunications services" and regulate them under their 2015 Title II Order. (Given this history, we think it odd that NPRM 17-60, WC Docket No. 17-108, para. 23, would claim that "the Commission abruptly departed from its prior posture" with this Title II Order: It was hardly abrupt. The FCC had tried since 2008 to stop Comcast from censoring people's Internet usage and seemed to have exhausted lesser remedies.)

***c. The Commission does not have legal authority to classify broadband Internet access service as an information service because it is not "within the bounds of reasonable interpretation."***

Under an assumption that "last mile" broadband Internet data services are classified as a separate and distinct service, "Argument a" makes the claim they should be classified as a "telecommunications service." This argument makes the assertion that "last mile" broadband Internet data services *must* be classified as a separate and distinct service, and thus *must* under definitions in the Act be classified as a "telecommunications service."

In the 1990's the interpretations of the Act in the Stevens Report<sup>21</sup> are consistent, if not reasonable, in the marketplace and technology of that day. However in today's telecommunications marketplace we have providers that offer telephone service, broadband Internet connection service, email service, and even television and voicemail access, all over the same communications medium with "last mile" communications connections originating in a single facility.

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<sup>18</sup> *FCC 17-60, para. 18.*

<sup>19</sup> *Comcast Corp. v. FCC*, 600 F.3d 642 (D.C. App. 2010).

<sup>20</sup> *Protecting and Promoting the Open Internet, Report and Order on Remand, Declaratory Ruling, and Order*, 30 FCC Rcd 5601, 5921 (2015) (Dissenting Statement of Commissioner Ajit Pai) (*Pai 2015 OI Order Dissent*), cited from Commissioner Clyburn's dissent in NPRM 17-60, p. 65.

<sup>21</sup> *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501, 11536, para. 27, 39, 46, 60, 73-75, and 82 (1998) (*Stevens Report*). Note 23 in WC Docket 17-108.

The argument that Internet Services were an “information service” has a long legislative history, based on the idea that the strict point-to-point communication aspect of Internet access was not a distinct and separate service, but rather was aggregated with the computing, storage, and other services usually considered part of the “edge” provider’s role today.

Using these same bundling or aggregating of services interpretations described in the Stevens Report with today’s telecommunications marketplace would force a conclusion that the telephone service in such an offering was also an “information service” and subject only to those lesser regulatory requirements. Congress in writing the Act clearly did not intend that result (as clearly indicated in the Stevens Report), and it provided for the concept that interpretation may need to change as technology changes.

We quote the entirety of Paragraph 60 of the Stevens Report here due to its significance. Footnote references were removed to avoid confusion:

“60. We recognize that the question may not always be straightforward whether, on the one hand, an entity is providing a single information service with communications and computing components, or, on the other hand, is providing two distinct services, one of which is a telecommunications service. It is plain, for example, that an incumbent local exchange carrier cannot escape Title II regulation of its residential local exchange service simply by packaging that service with voicemail. Since Computer II, we have made it clear that offerings by non-facilities-based providers combining communications and computing components should always be deemed enhanced. But the matter is more complicated when it comes to offerings by facilities-based providers. We noted recently in the Universal Service Fourth Order on Reconsideration, considering a related question, that ‘[t]he issue is whether, functionally, the consumer is receiving two separate and distinct services.’ ”<sup>22</sup>

To quote again: “[t]he issue is whether, functionally, the consumer is receiving two separate and distinct services.” The answer given, in the case of a computational and storage based voice mail service augmenting a telephone service, is these must be treated as a “distinct services.”<sup>23</sup>

In the modern Internet communications market, the service of transport of “last mile” broadband Internet data certainly *can* be considered a separate and distinct service, as distinguished from “edge” provided services like data storage of email, web hosting services, etc. This communication occurs using specific technical transfer protocols (eg TCP/IP) that provide varying degrees of reliability in transferring data from a specified originating point to a destination point without modification. Point-to-point communication over the “last mile” almost exclusively relies on TCP/IP, which is by definition a “reliable transport,” or related highly technical protocols with differing degrees of reliability.”<sup>24</sup>

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<sup>22</sup> *Id.* at ¶ 60.

<sup>23</sup> *Id.*

<sup>24</sup> IBM Knowledge Center: *TCP/IP concepts*  
[https://www.ibm.com/support/knowledgecenter/en/SSLTBW\\_2.1.0/com.ibm.zos.v2r1.hala001/itctcipcon.htm](https://www.ibm.com/support/knowledgecenter/en/SSLTBW_2.1.0/com.ibm.zos.v2r1.hala001/itctcipcon.htm) (last visited July 17, 2017).

Today many telecommunications companies offer both telephone and Internet services in the same consumer bundle, already requiring The Commission to regulate those services as separate and distinct (or else telephone service would be aggregated with computing services and regulated as an “information service”). Thus the communication product delivered to the consumer is already broken down to separate and distinct services, one including email with its storage and computing aspects (thus “information”) and telephony service (thus “telecommunications service”). Thus we often have at least three kinds of services: 1) telephony, 2) broadband Internet data transfer (point-to-point), and 3) data, storage and computation services such as email, voicemail, and other Internet *site* based services bundled into the subscriber’s package. Services 1) and 2) are actually forms of data transport, and 3) is provided by a remote “edge” provider, possibly the telecommunication company itself, but often an outsourced service.

So we face the question of the logic of where to classify service group “3”)--is it aggregated into the broadband Internet data transfer “2)”? Here the logical reasons for bundling these services fails. There is already a necessity to have distinct and separate categories of services provided and accessed by the subscriber. The logic that there is an integral “bundle” of services in a unified service package now fails. “Bundle” all the services for regulatory analysis, and the telephony service is in that bundle with data storage services.

Some of the data services (such as voicemail, phone record keeping, billing) are associated with the telephony component. Some are associated with the “last mile” broadband Internet data traffic (email, free web page, etc.)

But we furthermore now have a precedent in that *Title II Order* of 2015<sup>25</sup> regulated the data services and “last mile” broadband point-to-point Internet communication services as separate and distinct services offered by a telecommunications company under different classifications, and for the present has designated “last mile” broadband point-to-point Internet communication service as a “telecommunications service.” There is no logic to “put the genie back in the bottle,” so to speak, in the current telecommunications technology and business climate. The Commission must decide where the “last mile” broadband point-to-point Internet communication services fit, but as separate and distinct service from the data services and telephony services that are typically bundled in the same consumer package in so many markets.

As seen in “Argument a,” once the broadband point-to-point Internet communication services are considered as separate and distinct from the other services, only one classification fits the definition of the Act. That component, the point-to-point data transfer does not modify the data being transmitted, it reliably transfers that data unmodified between points selected by the subscriber’s browser or other application.

Thus we conclude that the separate and distinct service of point-to-point broadband Internet communication, bundled with various services in the subscriber service package, must according to the Act be classified as a “Telecommunications Service.” Precedent has already

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<sup>25</sup> *Protecting and Promoting the Open Internet, Report and Order on Remand, Declaratory Ruling, and Order*, 30 FCC Rcd 5601, 5921 (2015) (Dissenting Statement of Commissioner Ajit Pai) (*Pai 2015 OI Order Dissent*), cited from Commissioner Clyburn’s dissent in NPRM 17-60, p. 65.

occurred in regulating this communication service as a separate and distinct service. This decision on classification is the only conclusion “within the bounds of reasonable interpretation.”

#### **IV. CONCLUSION**

The Restoring Internet Freedom NPRM<sup>26</sup> should not be adopted. The Telecommunications Act of 1996 does not support the conclusion that the operation of modern “last mile” broadband services are an “information service” (contrary to past decisions based upon prior technology and practices). Commission precedent has been inconsistent under the Title I classification and Title II classification clarifies regulations. And the Commission does not have legal authority to classify broadband internet access service as an information service.

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<sup>26</sup> WC Docket No. 17-108.