

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554**

In the Matter of

Safeguarding and Securing the Open Internet

WC Docket No. 23-320

**COMMENTS OF INTERNET2**

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## SUMMARY

Research and education (“R&E”) networks play a critical and specialized role in advancing the broadband capabilities of our nation. Indeed, the R&E community, which includes Internet2 and our state and regional networking partners, played a seminal role in the creation of the internet – as well as the services and applications that have made it the most transformative technology of the last hundred years. Fast forward to today, much of the cutting-edge research that is taking place at and between our country’s research universities and private laboratories across the country is powered by the Internet2 Network. In fact, Internet2’s current 30.4 Terabit capacity national network positions the Internet2 Network as one of the most advanced networks in the world, purposely built and dedicated to meeting the specific needs of the R&E community we serve.

It is because of this uniqueness that Internet2 urges the Commission to ensure that any final rules adopted in this proceeding do not stray beyond the limited scope of how broadband internet access service has been historically defined. Simply put, Title II common carrier regulation should not apply to purpose-built networks or specialized network arrangements provided pursuant to customized agreements. Such offerings fall outside the definition of BIAS on multiple grounds, and the Commission is correct to continue excluding specialized networks from regulations designed for standardized mass-market retail services that are the subject of this proceeding.

And by extension, given the highly specialized applications being enabled through Internet2’s network, the Commission should also continue to refrain from regulating internet traffic exchanges associated with R&E networks. Any other approach would open the door to the unintended consequences of preventing R&E network operators from taking actions that are in the best interests of research and education.

## **BACKGROUND ON INTERNET2**

Internet2 is a non-profit, member-driven advanced technology community founded in 1996 by the nation's leading higher education institutions that provides a secure high-speed network, cloud solutions, research support, and identity and access management services tailored for research and education ("R&E"). Internet2 helps U.S. R&E organizations to solve shared technology challenges and develop innovative solutions in support of their educational, research, and community service missions. Internet2 also operates the nation's largest and fastest coast-to-coast national research and education network ("NREN"), which now serves 323 U.S. universities, 59 government agencies, and 45 regional and state education networks.

Internet2 also operates the InCommon Federation, which facilitates secure, unified, and seamless single sign-on access to local and global research and academic collaboration resources for more than 10 million users and 800 educational institutions, research organizations, and commercial resource providers in the U.S. InCommon makes possible trustworthy academic collaboration that reaches far beyond what a single organization can do on its own, through identity and access management technologies and services that are integrated across the globe. Internet2 also offers its eduroam service in the U.S. to enable seamless roaming Wi-Fi at nearly 1,000 colleges, universities, schools, museums, libraries, and research facilities across the country.

Further, Internet2 plays a key role as a convener and facilitator of the R&E community. Internet2 regularly brings together representatives from academia, federal agencies, and private industry to foster collaboration and find solutions to common challenges related to R&E cyberinfrastructure that no single institution or organization could accomplish independently. In fact, Internet2 collaborates with a multitude of NREN partners across the globe that represent more than 100 countries. Finally, Internet2 supports the R&E community through the Internet2 NET+ Cloud Services Program, which enables R&E institutions to adopt cloud solutions through a

streamlined process that minimizes the business, legal, financial, and other challenges associated with migrating from on-campus to cloud-based solutions.

Ultimately, the common thread between Internet2 and the larger R&E community is the principle of network openness: increased connectivity between scientists, researchers, government, and community anchor institutions is fundamental to a free and educated society, both in theory and in practice. This has led to significant advancements in science, research, and education, as well as a history of continuous innovation that led to the invention of the internet itself. Internet2 will continue to operate according to open network principles. However, Internet2 urges the Commission to follow through on its current proposal to make clear that the scope of any rules adopted in this proceeding would not apply to private networks or specialized network arrangements provided pursuant to customized agreements. Internet2 therefore urges the Commission to provide clear parameters about the scope of any final rules so that the R&E community is not adversely impacted by any unintended consequences stemming from the Commission's efforts to protect consumers of mass-market retail broadband services.

## DISCUSSION

### **I. The Commission Correctly Excludes Individualized or Private Networking Arrangements from The Proposed Scope Of Reclassification**

Internet2 strongly agrees with the Commission's proposal to limit the scope of any reclassification adopted in this proceeding to the definition of "broadband Internet access service" the Commission has utilized previously. NPRM, ¶ 59. That is, reclassification would only apply to services that, in relevant part, consist of a "*mass-market retail* service by wire or radio that provides the capability to transmit data to and receive data from substantially all internet end points," with "mass market" further defined as "a service marketed and sold on a standardized basis to residential customers, small businesses, and other end-user customers such as school[s] and libraries." *Id.* ¶¶ 59-60 (emphasis added).

It should be noted at the outset that the Commission has historically treated enterprise and mass-market retail broadband offerings differently on a consistent basis, and it continued to do so in its 2010 *Open Internet Order*.<sup>1</sup> In that decision, the Commission ruled that the Open Internet rules should only apply to “mass market” internet access services that are “marketed and sold on a standardized basis” to retail end users.<sup>2</sup> In contrast, the Commission explicitly excluded from the Open Internet rules enterprise services, which the Commission noted “are typically offered to larger organizations through customized or individually negotiated agreements.”<sup>3</sup>

Similarly, the Commission reaffirmed in its *Business Data Services Order* that, even with respect to enterprise offerings, it is still critical to distinguish between standardized service offerings and individually tailored arrangements. *BDS Order*, ¶ 285. That is, under the Commission’s “longstanding approach to evaluating private and common carriage classification,” specialized network arrangements based on individualized networking requirements fall outside of Title II common carrier services on this independent basis. *Id.* Or, more plainly, “[w]hen a provider holds out an offering on a common carrier basis the service is a common carrier telecommunications service regardless of the identity of the provider or the technology being used. Likewise, when the manner of a provider’s offering satisfies the test for private carriage, the service will be classified as private carriage regardless of the identity of the provider or the technology being used.” *Id.*, n.721. For these reasons, the Commission expressly reassured the R&E community that their specialized networking arrangements would not be swept into common carrier regulation. *Id.*, ¶ 285.<sup>4</sup>

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<sup>1</sup> 2010 *Open Internet Order*, ¶ 47.

<sup>2</sup> *Id.* ¶¶ 44-46.

<sup>3</sup> *Id.* at ¶ 58.

<sup>4</sup> Likewise, in the context of CALEA, the Commission held that if R&E networks “are engaged in the provision of facilities-based private broadband networks or intranets that enable members to communicate with one another and/or retrieve information from shared data libraries **not available to the general public**, these networks appear to be **private networks** for purposes of

This distinction between standardized broadband offerings to retail consumers and individually negotiated network arrangements tailored to a particular user's needs takes on added importance as the Commission once more considers using its authority under Title II, which, again, is applicable to common carriers.<sup>5</sup> Indeed, the test for common carriage is universally recognized as having the following two criteria: "(1) whether the carrier 'holds himself out to serve indifferently all potential users'; and (2) whether the carrier allows 'customers to transmit intelligence of their own design and choosing.'"<sup>6</sup>

Consistent with the principles of *private* carriage, the Internet2 Network provides unique network and data storage solutions to each of its members, and Internet2 actively manages the services it provides for its members' benefit. The Internet2 Network is uniquely designed and engineered to meet the needs of some of the most demanding internet users in the country, namely

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CALEA.... We therefore make clear that **providers of these networks are not included as 'telecommunications carriers'** under the SRP with respect to these networks." *In the Matter of Commc'ns Assistance for Law Enforcement Act and Broadband Access and Services*, 20 FCC Rcd. 14989, ¶ 36 n.100 (2005) (emphasis added).

<sup>5</sup> See, e.g., 47 U.S.C. § 201(a) ("It shall be the duty of every **common carrier** engaged in interstate or foreign communication by wire or radio to furnish such communication service upon reasonable request therefor) (emphasis added).

<sup>6</sup> *U.S. Telecom Association*, 295 F.3d at 1329–32 (2002) (emphasis added, citation omitted); see also *Qwest Commc'ns Corp. v. City of Berkley*, 146 F. Supp. 2d 1081, 1095 (N.D. Cal. 2001) ("The Supreme Court defined a common carrier as one that 'makes a public offering to provide [communications facilities] whereby all members of the public who choose to employ such facilities may communicate or transmit intelligence of their own design and choosing.'") (quoting *FCC v. Midwest Video Corp.*, 440 U.S. 689 (1979)); *Cellco Partnership v. FCC*, 700 F.3d 534, 547 (D.C. Cir. 2012) ("If a carrier is forced to offer service indiscriminately and on general terms, then that carrier is being relegated to common carrier status."); *Southwestern Bell Telephone Co. v. FCC*, 19 F.3d 1475, 1481 (D.C. Cir. 1994) ("[T]he indiscriminate offering of service on generally applicable terms ... is **the traditional mark of common carrier** service.") (emphasis added); *Nat'l Ass'n of Regulatory Util. Comm'rs v. FCC*, 533 F.2d 601 (D.C. Cir. 1976) ("The primary *sine qua non* of common carrier status is a quasi-public character, which arises out of the undertaking to carry for all people indifferently."); *Federal-State Joint Bd. on Universal Serv.*, Declaratory Ruling, 14 F.C.C.R. 3040 ¶ 21, 1999 WL 76932 (1999) (**the test of common carriage, as set forth in the NARUC cases**, analyzes the following factors: (1) whether the carrier 'holds himself out to serve indifferently all potential users;' and (2) whether the carrier allows 'customers to transmit intelligence of their own design and choosing.'") (emphasis added, citation omitted).

scientists, academics, and researchers in the nation's leading academic and research institutions. These users have expectations that they can move massive amounts of data on demand and that the network will deliver a predictable throughput at all times they offer a workload to the network. In order to accomplish this, Internet2 must actively manage its network and make specialized provisions to its members to ensure that the Internet2 Network is meeting their unique demands.

For example, the network service Internet2 provides to enable telemedicine must be provisioned and managed differently than the service that provides Internet2 member universities the bandwidth and capabilities to reliably transport the massive amounts of raw data generated by the Large Hadron Collider.<sup>7</sup> In both cases, however, the network services Internet2 provides to the R&E community are quantitatively and qualitatively different from the mass-market retail broadband services that are the subject of this proceeding.

Internet2, therefore, strongly agrees with the Commission's current proposal to limit the scope of any reclassification adopted in this proceeding to the definition of BIAS the Commission has previously utilized. Any other approach could have the unintended consequence of hindering the missions of R&E networks in the U.S.

## **II. The Commission Should Also Refrain from Regulating R&E Network Traffic Exchanges**

While the Commission is proposing *not* to adopt rules applicable to internet traffic exchange, NPRM, ¶ 187, Internet2 emphasizes here that, to the extent necessary, the Commission should also clarify that any rules it may adopt relative to internet traffic exchange arrangements should not apply in the context of specialized networks. Internet2 urges the Commission to be circumspect in terms of the scope of any traffic exchange rules and provide clear parameters. Simply put, and as detailed above, specialized networks are not mass-market retail broadband

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<sup>7</sup> See, e.g., <https://www.technologyreview.com/2008/02/14/222058/bandwidth-on-demand/>.

networks and should not be treated as such. Networks that do not serve the general public or are tailored to a particular user's needs should continue to operate according to whatever principles serve the individual user's best interests and outside of the rules being considered.

Any other approach may have the unintended consequence of abrogating specialized network agreements that both the provider and user find mutually beneficial and that are necessary to carry out the R&E missions of Internet2 members. In sum, the Commission should not paint with too broad a brush. Even if new rules concerning BIAS traffic exchange are necessary at some point to protect consumers, it is immensely important that such rules do not apply to specialized networks where their application would be not only unnecessary and inappropriate – but extremely harmful.

### **CONCLUSION**

For all the foregoing reasons, Internet2 respectfully requests that the Commission consider these comments and the unique role of R&E networks in this proceeding. The Commission should continue to exclude specialized R&E networks from the proposed scope of common carrier regulations under consideration, including as it relates to non-BIAS traffic exchange.

Respectfully submitted,

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