

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
Delete, Delete, Delete ) GN Docket No. 25-133  
)  
)

**COMMENTS OF THE DIGITAL PROGRESS INSTITUTE  
ON THE IP TRANSITION**

The Digital Progress Institute is a non-profit dedicated to bipartisan, incremental reform of technology and telecommunications policies. We appreciate the opportunity the Federal Communications Commission has given us and other stakeholders to participate in this proceeding to identify rules for deletion to alleviate unnecessary regulatory burdens.<sup>1</sup> In this set of comments, DPI focuses on removing the legacy regulations that continue to hinder the IP Transition.

In the rapidly evolving world of telecommunications, the transition from legacy time-division multiplexing (TDM) networks to modern IP-based infrastructure is not merely a technical upgrade—it is a national imperative. The IP Transition reflects the shift from the analog era to a digital, packet-based future where voice, video, and data converge over a single, efficient network. Yet despite the widespread adoption of IP technologies by consumers and enterprises alike, outdated Federal Communications Commission (FCC) regulations continue to delay the full realization of this transformation. If the United States is to remain globally competitive and ensure equitable broadband access for all, the FCC must expedite the IP Transition by eliminating legacy regulatory burdens.

---

<sup>1</sup> *Delete, Delete, Delete*, GN Docket No. 25-133, Public Notice, DA 25-219 (Mar. 12, 2025) (*Delete, Delete, Delete Public Notice*).

The IP Transition is nothing new. The Commission opened its *IP-Enabled Services* docket in 2004, recognizing that this “shift raises the question whether our existing regulatory framework merits reevaluation” and seeking “ways to distinguish those regulations designed to respond to the dominance of centralized, monopoly-owned networks from those designed to protect public safety and other important consumer interests.”<sup>2</sup> In 2012, AT&T and NTCA each petitioned the Commission to initiate a proceeding to hasten the transition to IP.<sup>3</sup> That same year, the Commission established a Technology Transitions Policy Task Force to facilitate the transition.<sup>4</sup> And through a series of orders in 2018 and 2019, the Commission took decisive action to speed the IP Transition by streamlining the network change notification process, expediting copper retirement, speeding applications to discontinue certain legacy services, and reforming pole attachment rules.<sup>5</sup>

Now, more than two decades after this saga began, it is time for the Commission to end it. The Commission should sunset the Public Switched Telephone Network by the end of 2028 so that no American family is left behind to use legacy technology in the 21<sup>st</sup> century. That means ending TDM interconnection mandates, terminating the intercarrier compensation regime,

---

<sup>2</sup> *IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, FCC 04-28, para. 36 (2004) (*IP-Enabled Services Notice*).

<sup>3</sup> *Pleading Cycle Established on AT&T and NTCA Petitions*, GN Docket No. 12-353, Public Notice, DA 12-1999 (2012) (seeking comment on AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition (Nov. 7, 2012) and Petition of the National Telecommunications Cooperative Association for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution (Nov. 19, 2012)).

<sup>4</sup> FCC Chairman Julius Genachowski Announces Formation of “Technology Transitions Policy Task Force,” GN Docket No. 13-5, Public Notice (Dec. 10, 2012).

<sup>5</sup> See *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking, FCC 17-154 (2017); *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Second Report and Order, FCC 18-74 (2018); *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment; Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket Nos. 17-84, 17-79, Third Report and Order and Declaratory Ruling, FCC 18-111 (2018).

detariffing legacy services, further streamlining copper retirement, and modernizing section 214 discontinuances.

*First*, TDM interconnection requirements—mandated under the Communications Act during the monopoly era—force service providers to maintain costly, outdated TDM infrastructure just to ensure interoperability with other carriers. This mandate is increasingly irrelevant in a market where the overwhelming majority of communications traffic—voice and otherwise—is IP-based. Maintaining parallel TDM and IP networks imposes excessive operational costs and discourages investment in next-generation networks by tying up capital in legacy systems that serve fewer and fewer users.

The Commission should sunset these mandates, forbearing from the enforcement of section 251(c)(2) of the Communications Act and rule 51.305 in 2028 for all non-IP services. Section 251(c)(2) imposes special interconnection requirements on only one player in the communications ecosystem—incumbent local exchange carriers (LECs)—that were premised on the monopoly system prevalent before the passage of the 1996 Act.<sup>6</sup> Rule 51.305 then implements that section, placing a reticulated set of interconnection requirements that include requirements to interconnect on the “line-side of a local switch,” on the “trunk side of a local switch,” on the “trunk interconnection points for a tandem switch,” at “[c]entral office cross-connect points,” and at “out-of-band signaling transfer points,” among other places.<sup>7</sup> The rule in turn requires incumbent LECs to “design” interconnection facilities,<sup>8</sup> prevents the customization of interconnection agreements to particular circumstances,<sup>9</sup> deters efficient network redesign and

---

<sup>6</sup> Communications Act § 251(c)(2).

<sup>7</sup> 47 C.F.R. § 51.305(a)(2).

<sup>8</sup> 47 C.F.R. § 51.305(a)(3).

<sup>9</sup> 47 C.F.R. § 51.305(a)(4).

technology upgrades,<sup>10</sup> and requires incumbent LECs to offer TDM-based “two-way trunking upon request.”<sup>11</sup> Competition in the market has eroded the foundation of these rules, and the success of IP interconnection in the broadband space shows that these reticulated requirements are not necessary to protect consumers. The continuation of these rules impedes the IP Transition by requiring incumbents to maintain TDM facilities and inducing competitors to invest in TDM facilities to gain a regulatory advantage. They are not even necessary because section 251(a) would still impose an obligation on all carriers to “interconnect directly or indirectly.”<sup>12</sup> In short, section 251(c)(2) and rule 51.305 meet all the criteria for forbearance.<sup>13</sup>

By sunseting TDM interconnection requirements, the FCC would send a clear signal that the future of communication is digital and that investment should be directed toward all-IP networks. And establishing a sunset date sooner rather than later will give all parties the time and incentive to move to alternative arrangements.

*Second*, intercarrier compensation—the system by which carriers pay one another for originating, terminating, or transiting voice calls—was designed for a TDM world characterized by monopolistic access, regulated rate structures, and the implicit subsidies needed for universal service. Today, it is an outdated and distortionary framework that incentivizes regulatory arbitrage, reduces network efficiency, creates needless paperwork, and encourages carriers to maintain TDM infrastructure and resist the IP Transition.

---

<sup>10</sup> 47 C.F.R. § 51.305(c) (“Previous successful interconnection at a particular point in a network, using particular facilities, constitutes substantial evidence that interconnection is technically feasible at that point . . .”).

<sup>11</sup> 47 C.F.R. § 51.305(f).

<sup>12</sup> Communications Act § 251(a)(1).

<sup>13</sup> Communications Act § 10.

The Commission has made numerous bipartisan reforms to set intercarrier compensation on a path to bill and keep. In 2011, the Commission adopted a “bill-and-keep methodology as a default framework and end state for all intercarrier compensation traffic.”<sup>14</sup> Today, all terminating switched access service charges and all toll-free originating access service charges have moved to the bill-and-keep framework.<sup>15</sup> The primary intercarrier compensation piece that remains is non-toll-free originating access. For the vast majority of carriers, non-toll-free originating access is not a significant source of revenue, and yet the continued presence of originating access fees pushes carriers to retain their TDM networks (so they can continue to collect some revenues) and creates an ongoing opportunity for arbitrage. To truly modernize the telecom ecosystem, the FCC must complete the transition to a bill-and-keep model. This would remove a significant barrier to the IP Transition.

*Third*, despite their diminishing relevance, many legacy TDM services are still subject to tariffing requirements. This regulatory relic compels incumbent LECs to file and maintain tariffs for legacy services such as DS1 and DS3 lines, even as the vast majority of the market has moved on. As the number of users declines, the cost per user of maintaining the plant goes up; nonetheless, arbitrary caps and tariffs stimulate artificial demand for those services. And the impact reverberates: Government users, for example, have relied on capped rates for legacy services (like voice-grade service, which provides only 64 kbps) as an excuse to delay any modernization of their systems.<sup>16</sup> In contrast, their IP-based equivalents—Ethernet and other packet-switched services—operate in a competitive, deregulated environment.

---

<sup>14</sup> *Connect American Fund et al.*, WC Docket No. 10-90 et al., FCC 11-161, para. 741 (2011).

<sup>15</sup> 47 C.F.R. §§ 51.907(h), 51.907(k), 51.909(j), 51.909(o).

<sup>16</sup> *See, e.g.*, Letter from Lawrence E. Strickling, Assistant Secretary for Communications and Information, NTIA, to the Honorable Tom Wheeler, Chairman, FCC, GN Docket No. 13-5, at 2-3 (July 29, 2015).

The tariffing process itself is cumbersome and slow, requiring service providers to obtain approvals for pricing and terms that should be dictated by market dynamics. And the archaic tariffing process generates tremendous paperwork. The rules for tariffing span two separate parts of the Code of Federal Regulations, with Part 61 (Tariffs) spanning 59 pages and Part 69 (Access Charges) spanning an additional 66 pages. These 125 pages of rules cover last-generation services that are in large part no longer demanded by consumers or enterprises. In other words, these rules divert investment from new infrastructure toward reams of paperwork.

And tariffing is unnecessary. Competition in the voice market is so replete that the Commission devotes only six paragraphs to the issue in its *Communications Marketplace Report*, noting that the United States has 2,708 separate fixed voice providers despite the fact that 76% of adults do not even have a fixed voice subscription at home anymore.<sup>17</sup> And in those few areas of the United States without multiple providers, the Commission's universal service rules require that rural carriers charge rates that are reasonably comparable to those in urban areas.

The FCC should fully detariff all remaining TDM services, abolishing Parts 61 and 69,<sup>18</sup> and allow prices to reflect their actual costs. This would free carriers to innovate and adapt to market demand, while also accelerating the transition to more reliable, scalable, and cost-effective IP-based services.

*Fourth*, another significant barrier to the IP Transition is the copper retirement rules. These rules, originally intended to protect consumers and ensure service continuity, now serve primarily to slow innovation and preserve the status quo. Under current policy, carriers must

---

<sup>17</sup> *Communications Marketplace Report*, GN Docket No. 24-119, 2024 Communications Marketplace Report, para. 156 & Fig. II.C.1 (2024).

<sup>18</sup> To be clear, some universal service rules for legacy carriers currently cross-reference certain tariffed charges. To the extent does not reform its rules for such carriers, they could continue to impute such charges for universal service purposes without actually filing any tariffs.

provide lengthy notice periods and face potential objections from state regulators, municipalities, and competitors before they can retire aging copper facilities—even when those facilities are no longer in active use or economically viable.

Specifically, rule 51.319(a)(3)(iv) and rule 51.325(a)(3) impose special notice obligations on incumbent LECs that seek to retire old and aging copper plants,<sup>19</sup> including special labelling requirements,<sup>20</sup> special notice requirements,<sup>21</sup> requirements for the Commission to separately provide notice,<sup>22</sup> 90-day waiting periods tied to that Commission public notice,<sup>23</sup> specialized objection procedures,<sup>24</sup> and specialized resolution procedures.<sup>25</sup> The Act requires none of this; it only requires that incumbent LECs provide reasonable public notice of changes that impact interconnection.<sup>26</sup> Laudably, the Commission has already taken action to streamline the copper-retirement and network-change notification processes,<sup>27</sup> and the Commission should codify those reforms (and further streamline the rules) for network-change notifications required by the Act.<sup>28</sup> But the special treatment of copper is unnecessary, unstatutory, and unhelpful. The Commission

---

<sup>19</sup> 47 C.F.R. §§ 51.319(a)(3)(iv), 51.325(a)(3).

<sup>20</sup> 47 C.F.R. § 51.329(c)(1).

<sup>21</sup> 47 C.F.R. § 51.333(a)(1).

<sup>22</sup> 47 C.F.R. § 51.333(b).

<sup>23</sup> 47 C.F.R. § 51.333(b)(2).

<sup>24</sup> 47 C.F.R. § 51.333(c).

<sup>25</sup> 47 C.F.R. § 51.333(f).

<sup>26</sup> Communications Act § 251(c)(5) (Incumbent LECs shall “provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier’s facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.”).

<sup>27</sup> See *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Order, DA 25-252 (2025).

<sup>28</sup> Notably, what is actually required by the statute is addressed elsewhere, in rule 51.325(a)(1)-(2). 47 C.F.R. § 51.325(a)(1)-(2) (requiring public notice that “[w]ill affect a competing service provider’s performance or ability to provide service” or “[w]ill affect the incumbent LEC’s interoperability with other service providers”).

should eliminate the copper retirement rules entirely so that carriers can focus their time and energy on next-generation networks.

*Fifth*, one of the most significant regulatory hurdles to completing the IP Transition lies in the FCC’s discontinuance rules. In the pertinent part, section 214 of the Act provides that “no carrier shall discontinue, reduce, or impair service to a community, or part of a community” without Commission approval.<sup>29</sup> To carry out that provision, the Commission has adopted a Kafkaesque scheme for discontinuances in rule 63.71, containing 52 subrules.<sup>30</sup> And those provisions require carriers to comb through their legacy service offerings and make repeated filings at the Commission to discontinue legacy services, slowing the IP Transition.

It does not have to be this way. Section 214 of the Act also provides that no carrier may deploy new services without Commission approval,<sup>31</sup> and yet the Commission has granted blanket authority for the construction of new lines.<sup>32</sup> The Commission has also made clear that its approval is not required when a service has no customers in a community because in such case, the carrier is not in fact providing service to that community.<sup>33</sup> And the Commission recently streamlined the process for discontinuances by waiving the requirement to file an application to grandfather a legacy service<sup>34</sup> and certain other extraneous requirements.<sup>35</sup>

---

<sup>29</sup> Communications Act § 214(a).

<sup>30</sup> 47 C.F.R. § 63.71.

<sup>31</sup> Communications Act § 214(a).

<sup>32</sup> 47 C.F.R. § 63.01(a).

<sup>33</sup> 47 C.F.R. § 63.71(g).

<sup>34</sup> *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Order, DA 25-251 (Wireline Comp. Bur. 2025).

<sup>35</sup> *Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment; Technology Transitions*, WC Docket No. 17-84, GN Docket No. 13-5, Order, DA 25-248 (Wireline Comp. Bur. 2025).



The Commission should leverage these reforms to propel the IP Transition. *For one*, it should codify its recent reforms to the discontinuance process. *For another*, it should expand its grandfathering-and-streamline-discontinuance procedures from “legacy data services operating at speeds lower than 1.544 Mbps” to *all* legacy non-voice services. There’s no reason to maintain a more burdensome process for legacy non-voice services that offer 1.545 Mbps when IP services can offer speeds faster than a gigabit. *For yet another*, the Commission should heed the Act and go one step further in revising its technology transition rules. Specifically, section 214 itself makes clear that “nothing in this section shall be construed to require a certificate or other authorization from the Commission for any installation, replacement, or other changes in plant, operation, or equipment . . . which will not impair the adequacy or quality of service provided.”<sup>36</sup> In other words, the Commission should consider whether it may require a carrier to even file an application (and receive approval) for a network upgrade that meets either the Adequate Replacement Test<sup>37</sup> or the Alternative Options Test<sup>38</sup>—or if instead such transitions are beyond the scope of section 214’s reach.

\* \* \*

The case for a faster and more decisive IP Transition is not just about technology—it is about competition, innovation, and the welfare of the American public. Every dollar spent propping up obsolete TDM infrastructure is a dollar not invested in next-generation networks. Every regulatory delay in retiring copper or discontinuing outdated services is a missed

---

<sup>36</sup> Communications Act § 214(a).

<sup>37</sup> 47 C.F.R. § 63.602.

<sup>38</sup> 47 C.F.R. § 63.71(f)(2)(ii).

opportunity to improve service quality, reduce costs, and extend broadband access to more American families and veterans.

To be clear, the Commission should take care to “protect public safety and other important consumer interests” throughout the IP Transition, as the Commission envisioned back in the *IP-Enabled Service Notice* more than 20 years ago.<sup>39</sup> That entails taking into account the needs of rural families, low-income veterans, the elderly, and others—which in turn may entail the revision of existing rules or adoption of new rules. The Digital Progress Institute would welcome that discussion. But it is beyond the scope of this proceeding, which is solely focused on “alleviating unnecessary regulatory burdens.”<sup>40</sup>

To accelerate the IP Transition, the FCC must act boldly. It must sunset TDM interconnection mandates and end intercarrier compensation regimes that distort market incentives. It must detariff all remaining legacy services to encourage migration to modern alternatives. It must expedite copper retirement and allow carriers to upgrade their networks. The FCC has both the authority and the responsibility to clear the path for the future. It should do so now, before the opportunity slips away.

Respectfully submitted,

/s/ Joel Thayer  
Joel Thayer  
President  
The Digital Progress Institute  
1255 Union Street NE  
Seventh Floor  
Washington, D.C. 20002

April 11, 2025

---

<sup>39</sup> *IP-Enabled Services Notice*, para. 36.

<sup>40</sup> *Delete, Delete, Delete Public Notice* at 1.