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

In the Matter of

Petition of the National Telecommunications Cooperative Association for a Rulemaking to Promote and Sustain the Ongoing TDM-to-IP Evolution

PETITION OF THE NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION FOR A RULEMAKING TO PROMOTE AND SUSTAIN THE ONGOING TDM-TO-IP EVOLUTION

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SUMMARY

The National Telecommunications Cooperative Association hereby petitions the Federal Communications Commission (the “Commission”) to initiate a rulemaking to examine means of promoting and sustaining the ongoing evolution of the Public Switched Telephone Network from a Time-Division Multiplexing (“TDM”)–based platform to an Internet Protocol (“IP”)–based infrastructure through targeted regulatory relief and the establishment of tailored near-term economic incentives.

The fundamental need of all Americans for affordable access to high-quality communications is independent of the technology used within the networks that connect them. The challenge facing industry and policy-makers concerns the development of a proper path by which to promote and, more importantly, sustain the already-ongoing IP evolution in a manner consistent with the core statutory objectives of protecting consumers, promoting competition, and ensuring universal service. In considering this challenge, it is useful to analogize the current regulatory construct to a foundation that is suspected of having some cracks. Within the range of ways by which to consider whether such cracks exist and how to address them, one can plot three fundamental approaches: (1) tear the foundation down; (2) examine the bricks and repair or replace them as needed; or (3) leave the foundation standing without change and hope that it holds.

The first option would effectively take a “sledgehammer” to the regulatory foundation, using (re)classification, forbearance, and/or preemption to discard, or depart almost entirely from, the statutory framework and the regulatory framework developed thereunder. It is unclear, however, whether such an experimental and sweeping “sledgehammer” approach can satisfy the statutory cornerstones of consumer protection, competition, and universal service. Moreover, if
one proposes that regulatory oversight stifles investment, the uncertainty of a regulatory vacuum and a lack of clear “ground rules” are likely to stifle investment even more.

On the other end of the range, regulators could simply hope the foundation will hold and continue to mechanically apply every current regulation “as is” in an IP-enabled world. But such an approach would fail to assess whether the regulatory foundation is built in the right way to fulfill the core statutory objectives in an evolving environment.

This Petition therefore recommends a more balanced approach of “smart regulation” that examines what has worked (or not) in protecting consumers, promoting competition, and ensuring universal service. After this review, the Commission can consider what from that framework should be kept, discarded, or modified as the IP migration continues. In other words, the Commission should maintain certainty by retaining and reasserting the clear regulatory foundation, while coordinating with state counterparts to examine each brick for potential replacement, repair, or removal. Specific steps the Commission should take are as follows:

1. Develop a list of specific existing regulations that may have limited or no applicability in the delivery of IP-enabled services (or even with respect to TDM-based services) because of technological change, competitive forces, or other regulatory, market, or economic developments;

2. Seek comment on which of the identified regulations: (a) might be eliminated for the specific purpose of enhancing the ongoing migration of networks from TDM-based to IP-based platforms while also furthering the statutory cornerstones of protecting consumers, promoting competition, and ensuring universal service; (b) might be retained in current form to satisfy the statutory cornerstones of protecting consumers, promoting competition, and ensuring universal service; and (c) might be retained but require modification in specifically defined ways (or might need to be replaced or supplemented by specific new regulations) to further the evolution of IP-enabled networks while serving the core statutory objectives of protecting consumers, promoting competition, and ensuring universal service; and

3. Set a firm but reasonable deadline to complete this comprehensive, but granular, “refreshing” of the governing regulatory framework such that the evolution of IP-enabled networks can be sustained.
A rulemaking that pursues such a balanced course will promote regulatory certainty and the core statutory objectives. Moreover, it will signal clearly to lenders, investors, and operators that the existing foundation will be subject to thoughtful examination and targeted changes. A “smart regulation” approach acknowledges that an IP migration is not to be encouraged for its own sake, but precisely because IP-enabled networks are presumed to – and must – promote more affordable access to higher-quality communications services for all Americans.

The Commission should pair such a “smart regulation” review with targeted, carefully calibrated nearer-term economic incentives to prompt investment in IP-enabled infrastructure. For example, one way the Commission could accelerate the continuing IP evolution in the nearer-term would be to: (a) confirm that all interconnection for the exchange of traffic subject to sections 251 and 252 is governed by the Communications Act of 1934, as amended (the “Act”), regardless of the technology used to achieve such interconnection; and (b) provide carriers with an incentive to offer IP interconnection by allowing them to recover through rates developed pursuant to the Act the costs of exchanging traffic through such interconnects. Such an “incentive-based” approach would reward carriers that seize the opportunity to invest in IP-enabled interconnections. Another measure the Commission should pursue in short order is providing small rural local exchange carriers with sufficient and predictable universal service support regardless of whether a customer purchases regulated “plain old telephone service.”

Today, if a consumer buys regulated voice and broadband, the network is eligible for universal service support – but if the same consumer decides to take only broadband, the infrastructure is no longer eligible for universal service support under current rules. This denial of universal service support defies consumer preference and makes no sense in a regulatory regime that purports to promote the deployment and adoption of broadband and IP-enabled networks.
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Pursuant to section 1.401 of the rules of the Federal Communications Commission (the "Commission"), 47 C.F.R. § 1.401, and in accordance with sections 1, 201, 202, 251, 252, and 254 of the Communications Act, as amended (the "Act"), 47 U.S.C. §§ 151, 201, 202, 251, 252, and 254, the National Telecommunications Cooperative Association ("NTCA") respectfully petitions the Commission to initiate a rulemaking to examine means of promoting and sustaining the ongoing evolution of the Public Switched Telephone Network ("PSTN") from a Time-Division Multiplexing-based platform to an Internet Protocol-based infrastructure through

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1 NTCA is an industry association representing nearly 600 network service operators across rural America. All of NTCA’s members provide voice and broadband services, and many of its members also provide video, satellite, wireless, and other communications-related services to their communities. Each member is a small business and also a “rural telephone company” as defined in the Act. NTCA’s members are dedicated to providing competitive modern telecommunications services and advancing the economic future of their rural communities.

2 See Professor David Gabel and Steven Burns, The Transition from the Legacy Public Switched Telephone Network to Modern Technologies, National Regulatory Research Institute Report No. 12-12, October 2012 ("NRRI Transition Report"), at n. 1. (“Time-division multiplexing (TDM) is a type of multiplexing in which two or more voice signals are transmitted over a single circuit by taking turns in individual time slots created on that circuit.”)
targeted, thoughtful regulatory relief and the establishment of more appropriate near-term economic incentives.

I. INTRODUCTION

The PSTN is sometimes portrayed as a distinct network composed of legacy, increasingly antiquated components that are uniquely and singularly TDM-based in nature. Those who view the PSTN in such a light have predicted urgently the "death of the PSTN." As Mark Twain might have put it, however, "reports of the death of the PSTN are greatly exaggerated." Rather, what is occurring already and should be promoted and sustained is an evolution of the PSTN — a technology shift within a network (or, really, a series of interconnected networks) that already enables essential, state-of-the-art communications among all American businesses and consumers. Circuit switching is already shifting to packet routing (such that it could perhaps better be said that we are moving toward a "PRCN" or a "Public Routed Communications Network"), and end-user devices have already been evolving rapidly from plain-old telephones to smarter devices of all kinds.

3 See id. at n. 2. ("Internet Protocol (IP) is a packet-switched technology where information is broken up into packets that are transmitted individually and can take different routes to their common destination.")

NTCA members and other small carriers have a strong interest in ensuring that this ongoing IP evolution is a near- and long-term success. These carriers have not stood idly while the IP evolution hurtles past them. To the contrary, these small carriers have been at the forefront of this evolution, leveraging entrepreneurship, private capital, universal service support, intercarrier compensation, sound working partnerships with federal and state regulators, and a commitment to the high-cost communities they serve to make responsible and “commendable” progress thus far in deploying broadband-capable networks and cutting-edge, IP-enabled switching/routing platforms. As of December 2010, small rural carriers had deployed broadband to over 92 percent of their customers, and more than half of these carriers had either already deployed or had plans to deploy softswitches by the end of 2011. Rural carriers have thus led the IP evolution to date, and this Petition reflects their strong interest in pursuing a sensible path to promote and ultimately sustain that ongoing transition.

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5 See High-Cost Universal Service Support, Federal-State Joint Board on Universal Service: Recommended Decision, WC Docket No. 05-337, CC Docket No. 96-45, FCC 071-4 (2007), at ¶ 30 (specifically citing small rural carriers as having done “a commendable job of providing broadband to nearly all their customers”). It must be noted, however, that just “getting broadband there” is not enough. The number of broadband-“served” customers should not become a mere “scoreboard” item for tracking. Instead, the key is that this ongoing migration to an IP-enabled, broadband-capable world must be sustainable, such that our nation does not just “get broadband there” in the short term, but we also “keep broadband there” over the long term at affordable rates and with high quality of service.

6 See NECA, Trends 2010 - A report on rural telecom technology, at 5 and 9 (available at: https://www.neca.org/cms400min/NECA_Templates/PublicInterior.aspx?id=100). Of course, in considering whether such progress can be sustained and can satisfy the objectives of protecting consumers and ensuring universal service in the long run, it is important to note that nearly three-quarters of this broadband as of December 2010 was at speeds below 4 Mbps. Id. at 5. In other words, despite the remarkable and efficient progress of small rural carriers to date in leading the IP evolution, there is a serious risk that they – and more importantly, their consumers and communities – will be left behind (or left out altogether) over time in the absence of sufficient and predictable support that facilitates their continuing participation in the IP evolution.
The fundamental need of all Americans for high-quality communications and affordable access to the services that enable such communications remains unchanged and is entirely independent of the underlying technology used within the PSTN or the PRCN that connects them. Indeed, the core objectives of the Act – which include, above all else, making available “so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide and world-wide wire and radio communication with adequate facilities at reasonable charges”\(^7\) – must apply with equal force whether services are rendered through Class 5 TDM switches and copper networks or routers, softswitches, and cutting-edge fiber or wireless solutions.

Regulatory distinctions that turn on what technology might be used to deliver a given service devolve into form over substance. The important distinctions for regulatory purposes should come not in how the service is delivered, but rather what the consumer receives. Any regulatory analysis driven primarily by network technology rather than consumer experience and expectation is doomed to fail those consumers in the end.\(^8\) Similarly flawed is any approach that elevates a desire to promote the achievement of any specific technological platform as a goal of its own significance without tether to the ultimate statutory cornerstones of protecting consumers, promoting competition, and ensuring universal service.\(^9\) Indeed, even as services may evolve beyond the boundaries of traditional telecommunications service offerings, for

\(^7\) 47 U.S.C. § 151.

\(^8\) See NRRI Transition Report, at 7-15 (discussing the evolution of network technologies underlying communications between Americans from late 19\(^{th}\) century to the early 21\(^{st}\) century).

\(^9\) See 47 U.S.C. §§ 151 (setting forth the purposes of the Act), 201 (requiring just and reasonable charges, practices, classifications, and regulations), 202 (prohibiting unjust or unreasonable discrimination), 251 (setting forth provisions for the development of competitive markets through interconnection and other duties), 252 (establishing processes for implementing section 251), and 254 (requiring the preservation and advancement of universal service).
example via inclusion of potential "information service" components, the Commission must not blindly accept the idea that the fundamental public policy objectives established by the Act can now safely be ignored. Finally, it is essential both as a matter of sound public policy and legal authority for the Commission to coordinate its analysis of next steps in a PRCN world with state regulators, as they are closest to the consumers, retain jurisdiction over intrastate services, and can help tailor solutions and tackle the challenges of fulfilling universal service and promoting competition on a localized basis.

II. A "SMART REGULATION" APPROACH TO PROMOTING AND SUSTAINING AN IP EVOLUTION MUST, ABOVE ALL ELSE, PROTECT CONSUMERS, PROMOTE COMPETITION, AND ENSURE UNIVERSAL SERVICE. IT MUST ALSO BALANCE REGULATORY CERTAINTY WITH THE NEED FOR A SURGICAL LOOK AT EXISTING REGULATIONS.

The policy path by which to promote and sustain the orderly evolution to more IP-enabled networks must not abandon or neglect the core statutory objectives of protecting consumers, promoting competition, and ensuring universal service. There is a wide range of policy options from which the Commission can choose in promoting and sustaining this ongoing transition. In this regard, it may be useful to think of the options before the Commission by analogizing the current regulatory construct to a foundation suspected of having some cracks. Although this foundation has served – and continues to serve – an essential role in fulfilling the core statutory objectives, its structure should at least be investigated. Across the range of options presented in deciding how to proceed, it is possible to plot at least three fundamental approaches: (1) tear the foundation down altogether; (2) examine the foundation carefully and repair or replace specific bricks; or (3) leave the foundation standing without change and hope that it holds.
Translating these choices to the policy challenges at hand, one option would be to take a "sledgehammer" to the regulatory foundation. This would be captured by using (re)classification, forbearance, and/or preemption to discard, or depart almost entirely from, the statutory framework laid out in the Act and the regulatory framework developed thereunder. The apparent thinking behind such an approach would be that: (a) regulation can stifle investment; (b) "innovation" rather than regulation is best positioned to protect consumers, promote competition, or ensure universal service in an IP-enabled world; and (c) investment to upgrade networks from TDM-based to IP-enabled would be unleashed if only regulators would get out of the way. Of course, such claims have been made in the past in attempt to leverage regulatory relief or assert the failings of regulation,10 and yet remarkable investment and innovation has somehow overcome the "challenges" of continuing regulatory oversight.11

It is unclear whether such an experimental and sweeping "sledgehammer" approach, where the interests of individual consumers and the terms and conditions by which networks are

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10 See, e.g., AT&T Statement on T-Mobile Closing Several Call Centers, March 23, 2012, available at: http://attpublicpolicy.com/wireless/att-statement-on-t-mobile-closing-seven-call-centers ("So what's the lesson here? For one thing, it's a reminder of why 'regulatory humility' should be more than a slogan. The FCC may consider itself an expert agency on telecom, but it is not omniscient. And when it ventures far afield from technical issues, and into judgments about employment or predictions about business decisions, it has often been wildly wrong."); Robert S. Pindyck, Mandatory Unbundling and Irreversible Investment in Telecom Networks, National Bureau of Economic Research, Working Paper 10287, February 2004, at 1, available at: http://www.nber.org/papers/w10287.pdf (Verizon-commissioned study asserting that certain mandates in the Act "reduce incentives to build new networks or upgrade existing ones").

connected hinge largely on the discretion of individual industry participants, can satisfy the statutory cornerstones of consumer protection, competition, and universal service. It is also unclear how such an approach would (or even could) work in light of legal mandates that compel state regulators and consumer advocates to protect the interests of their own consumers. For example, if a dispute arises between interconnected networks in a “deregulated” environment and connections are slowed, misrouted, degraded, or even shut off altogether, can a federal or state regulator act quickly enough to step back in and protect consumers and the public interest? Would the federal or state regulator even have authority or ability to do so if prior regulatory classifications of the services at issue or specific decisions preclude or even preempt such action? (Staying with the analogy used herein, could the “regulatory foundation” be rebuilt quickly enough in the event of market failure or, worse still, disaster?)

What if a dispute (or sheer neglect or disinterest) resulted in a failure to transmit public safety-related traffic (e.g., calls to 911) or other calls or mission-critical data necessary for businesses to operate? What if a dispute (or sheer neglect or disinterest) resulted in entire regions of the country being effectively “cut off” from other parts?

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13 Certainly the experience of rural consumers in failing to receive many long distance telephone calls because of a shadowy niche between regulated long distance services and ostensibly unregulated least-cost router services fosters little, if any, confidence in the “market” alone to solve such concerns. See, e.g., Ex Parte Letter from Michael R. Romano, Senior Vice
Such consumer-oriented concerns must be thoroughly considered and addressed – and the clear need for a cooperative relationship between federal and state regulators thought carefully through – before a sledgehammer is taken to existing regulatory constructs and before a “Wild West” approach is permitted to cavalierly substitute either theories about “innovation” or predictive judgments about competition for thoughtful oversight. If regulatory oversight stifles investment, the uncertainty of a regulatory vacuum and a lack of clear “ground rules” are likely to stifle investment even more – and far more likely to leave consumers in the lurch.

On the other end of the spectrum, regulators could simply hope the existing regulatory foundation will hold with few, if any, updates or repairs. This option would be captured by mechanically applying every current regulation “as is” to services in an IP-enabled world. The apparent thinking behind such an approach would be that the existing regulatory framework has

President – Policy, NTCA, to Marlene H. Dortch, Secretary, Commission, WC Docket Nos. 11-39 and 07-135; CC Docket No. 01-92 (filed Sept. 5, 2012) (explaining that “many NTCA members have experienced an increase in rural call completion problems,” and noting “that call completion problems will persist and are likely only to increase unless and until the [Commission] sends a clear signal that parties will actually be held liable for failing to deliver calls”).

Indeed, a notable example of the potential shortcomings of relying largely upon predictive judgments and promises about competition can be found in the experience with respect to price-cap regulated special access services. Compare Price Cap Performance Review for Local Exchange Carriers, CC Docket No. 94-1, First Report and Order, 10 FCC Rcd 8961, 8989 (1995), at ¶ 64 (“competition can be expected to carry out the purposes of the Communications Act more assuredly than regulation,” and indicating regulation is needed “only where and to the extent that competition remain[s] absent in the marketplace”) with Special Access Rates for Price Cap Local Exchange Carriers, WC Docket No. 05-25, AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, RM-10593, Report and Order (rel. Aug. 22, 2012), at ¶ 22 (“the administratively simple competitive showings we adopted in 1999 have not worked as intended, likely resulting in both over- and under- regulation of special access in parts of the country”). Regardless of one’s perspective on the merits of this ongoing special access examination, any framework that requires thirteen-plus years to determine whether competition has worked as an effective substitute for regulation – and then finds at least some evidence it may not have done so – puts consumers, competition itself, and universal service all at risk.
worked well enough to protect consumers, promote competition, and ensure affordable access to high-quality networks. Thus, despite the possibility of some weak spots in the foundation, the theory would be that applying regulations in the same manner going forward would engender similar public policy results. But such a simplistic approach would fail to engage in a necessary examination of whether consumer needs, technological change, or other market conditions should drive regulatory change. In short, it fails to assess whether the regulatory foundation is still built in the right way to fulfill the core statutory objectives in an evolving environment. For example, certain regulations, such as legacy discontinuance reports and equal access obligations, may have decreasing significance and questionable utility in serving the objectives of the Act in light of shifts in the communications market.

It is essential therefore to adopt a more thoughtful and balanced approach to regulatory reform and promoting an IP evolution than engaging simply in either unfettered deregulation (which may create a “Wild West” that scares off investment) or rote mechanical application of legacy regulations (which may deter investment as circumstances evolve). Specifically, the Commission should instead engage in “smart regulation” and avoid either taking a sledgehammer to the regulatory foundation or leaving the regulatory construct unchanged and hoping for the best. Such a thoughtful, carefully calibrated approach would capture the universally acknowledged importance of striking a balance between allowing markets to operate and the need for tailored regulations that enable and promote such markets.\textsuperscript{15} This more sensible

"golden mean" would require a discerning look at what has worked (or not) in protecting consumers, promoting competition, and ensuring universal service, and then consider what from that existing regulatory framework should be kept, discarded, or modified in "all-IP world." This middle course would also ensure that the authority and core competencies of state public utility commissions and the interests of consumer advocates are acknowledged, respected, and incorporated within the process.16 Sticking with the analogy used herein once more, the Commission should seek to maintain certainty by retaining and reasserting a firm and clear regulatory foundation, while coordinating with state counterparts to examine specific bricks for potential replacement, repair, or removal where their utility or effectiveness is in question.17

speech N.htm (quoting then-Senator Obama during the 2008 presidential campaign: "Our free market was never meant to be a free license to take whatever you can get, however you can get it. That is why we have put in place rules of the road to make competition fair and open and honest. We have done this not to stifle, but rather to advance, prosperity and liberty.").

16 See, e.g., 47 U.S.C. §§ 152(b) (preserving state jurisdiction over intrastate communications), 252 (defining the state role in setting rates for reciprocal compensation and approving or arbitrating interconnection agreements), and 254(a)(1) (requiring the establishment of a Federal-State Joint Board on Universal Service to implement the provisions of sections 214(e) and 254 of the Act).

17 It is also worth noting that even within existing regulatory constructs, parties have found means by which to achieve innovative, market-based solutions. For example, the Commission has for some time permitted certain carriers to use "contract tariffs" and other vehicles to tailor individual services to consumer needs. See 47 C.F.R. § 69.727; Access Charge Reform, Fifth Report and Order and Further Notice of Proposed Rulemaking, 14 FCC Rcd. 14221, 14291 (1999). The Telecommunications Act of 1996 also enabled individual parties to negotiate interconnection agreements with terms and conditions tailored for specific circumstances. 47 U.S.C. §§ 251 and 252. Such agreements led, among other things, to negotiated rates and resolutions of contested traffic exchange and interconnection issues. See, e.g., Level 3 and Bell Atlantic Reach Agreement on Reciprocal Compensation: Past Reciprocal Compensation Billing Dispute Settled Between the Two Carriers, Level 3 Communications Press Release, Oct. 21, 1999, available at: http://level3.mediaroom.com/index.php?s=23600&item=65687. But the essential lesson to draw from these examples is that such tailored tariff terms and negotiated provisions do not and will not occur within a regulatory vacuum. Instead, they have developed against a backdrop of state-federal regulatory partnerships under the Act that help define a reasonable outcome in the event that negotiations cannot achieve a resolution. This is essential
To this end, NTCA respectfully requests that the Commission initiate a rulemaking that starts from the premise that the ultimate goal of the existing framework – making available “a rapid, efficient, Nation-wide and world-wide wire and radio communication with adequate facilities at reasonable charges”\(^\text{18}\) – can and must apply with equal force regardless of the technology used to achieve such communication. The Commission should then proceed methodically to discern how it can carry out the core statutory objectives of consumer protection, competition, and universal service while furthering the ongoing evolution of the PSTN to a PRCN. Specific steps to take as part of this “smart regulation” approach are as follows:

1. Develop a list of specific existing regulations that may have limited or no applicability in the delivery of IP-enabled services (or even with respect to TDM-based services) because of technological change, competitive forces, or other regulatory, market, or economic developments;

2. Seek comment on which of the identified regulations: (a) might be eliminated for the specific purpose of enhancing the ongoing migration of networks from TDM-based to IP-based platforms while also furthering the statutory cornerstones of protecting consumers, promoting competition, and ensuring universal service; (b) might be retained in current form to satisfy the statutory cornerstones of protecting consumers, promoting competition, and ensuring universal service; and (c) might be retained but require modification in specifically defined ways (or might need to be replaced or supplemented by specific new regulations) to further the evolution of IP-enabled networks while serving the core statutory objectives of protecting consumers, promoting competition, and ensuring universal service; and

3. Set a firm but reasonable deadline to complete this comprehensive, but granular, “refreshing” of the governing regulatory framework such that the evolution of IP-enabled networks can be sustained.

Such a “smart regulation” approach would strike an appropriate balance between the extreme ends of the range of potential regulatory process. Simply throwing out “the old” and to protect consumers, promote competition, and ensure universal service where market-driven outcomes may fail to yield a reasonable result. If some markets fail, a company might lose money. If communications markets fail, consumers are at risk of losing service contrary to federal and state laws and good public policy.

recreating things “bottoms-up” from scratch (or not recreating things at all) would create a regulatory vacuum, confuse consumers and even put some at risk, and generate massive waves of uncertainty that undermine (rather than promote or accelerate) investment in the IP evolution. By contrast, a “smart regulation” approach that seeks to examine thoughtfully individual bricks in the regulatory foundation for potential repair, replacement, removal, or upgrade would provide the much-needed certainty of starting from time-tested statutory principles, regulatory frameworks, and related jurisprudence and administrative decisions. At the same time, a “smart regulation” approach should only start from that existing backdrop; it should seek to avoid application of rules with limited applicability in today’s (and tomorrow’s) communications markets by evaluating in a measured way the degree to which each specific regulation promotes or deters the IP evolution and is essential or unnecessary to fulfill the core objectives of protecting consumers, promoting competition, and ensuring universal service. Finally, this effort must be undertaken in coordination with state counterparts to ensure that a comprehensive regulatory review considers their respective legal mandates and consumer interests.

In short, a rulemaking that pursues the balanced course recommended herein will promote regulatory certainty and the core statutory objectives by starting from a well-known, time-tested existing baseline of legal and regulatory requirements. Moreover, it will simultaneously signal to lenders, investors, and operators that those frameworks will be subject to prompt review and potential upgrade on a surgical, thoughtful, and targeted basis. In the end, this “smart regulation” approach acknowledges that an IP-enabled network migration is not to be encouraged merely for its own sake, but precisely because IP-enabled networks are presumed to – and must – promote more affordable access to higher-quality communications services for all Americans.
III. THE COMMISSION SHOULD PAIR A “SMART REGULATION” REVIEW WITH NEAR-TERM ECONOMIC INCENTIVES THAT STIMULATE THE CONTINUING IP EVOLUTION.

As a further step, the Commission should pair such a “smart regulation” review of existing rules with consideration of how to inject targeted near-term economic incentives to prompt greater investment in IP-enabled infrastructure even as this comprehensive review is underway. It is a truism to say that the best way to encourage any given action by private parties is to make such action consistent with their economic self-interest. If the Commission is interested in promoting an IP evolution as promptly as possible because it is for the benefit of consumers, it should therefore adopt certain carefully designed “incentive-based” measures, and should move quickly to adopt (and partner with states to adopt, as necessary and appropriate) such measures even in advance of the more complete examination noted above.

For example, one specific measure that the Commission should consider for immediate adoption is an incentive-based mechanism that would allow carriers to recover costs for the exchange of communications traffic where they agree to make available IP-based interconnection in accordance with the well-defined statutory framework. Today, there is significant uncertainty (although there perhaps should not be) surrounding the rights and obligations that govern IP interconnection and the exchange of traffic through such interconnects. As noted earlier in this Petition, if the perception of heavy-handed regulation is a deterrent to investment, regulatory uncertainty is far worse in driving dollars away from markets. Lingering uncertainty surrounding IP interconnection for the exchange of traffic that is otherwise subject to sections 251 and 252 of the Act in all respects hinders the deployment of IP-enabled networks – in fact, it would seem to create perverse technology choice incentives by encouraging retention of TDM-based networks (at least at the points where they interconnect
with other networks) simply for the purpose of ensuring a clearer set of “ground rules” around interconnection and intercarrier compensation.

Accordingly, the Commission could perhaps best accelerate the continuing IP evolution in the near-term by: (a) confirming that all interconnection for the exchange of traffic subject to sections 251 and 252 is governed by the Act, regardless of the technology that might happen to be used to achieve such interconnection; and (b) providing carriers with an incentive to offer IP interconnection by allowing them to recover through rates that would be developed pursuant to the Act the costs of exchanging traffic through such interconnects. Such an “incentive-based” approach would reward carriers that seize the opportunity to invest in IP-enabled interconnections across their networks.\(^{19}\) Such a structure would also have the benefit of more closely resembling the means by which carriers actually interconnect and compensate one another in “the Internet world.” Indeed, as the Commission is well aware, interconnection within IP-based/Internet structures is not “cost free” for most interconnecting entities, except in cases where traffic scope and balances are roughly equivalent.\(^{20}\)

\(^{19}\) Those who claim that such a measure would only reward operators who are not interested in building their own networks could not be more wrong. As noted earlier, small rural local exchange carriers such as those within NTCA’s membership have been acknowledged as leaders in the deployment of fiber networks and IP-enabled and broadband network technologies. See footnotes 5 and 6, supra, and accompanying text. Given these efforts, those who argue that IP interconnection would somehow reward those who only want to avoid building their own networks are sorely mistaken at best and disingenuous at worst. To the contrary, allowing those who have built IP-enabled networks to recover the costs of offering interconnection with their cutting-edge networks would clearly promote rather than deter investment in such networks.

\(^{20}\) See, e.g., “Peering” (available at: http://en.wikipedia.org/wiki/Peering) (“in order for a network to reach any specific other network on the Internet, it must either: [1] Sell transit (or Internet access) service to that network (making them a ‘customer’), [2] Peer directly with that network, or with a network who sells transit service to that network, or [3] Pay another network for transit service, where that other network must in turn also sell, peer, or pay for access.”)
Another near-term measure the Commission should pursue to encourage an effective migration to a PRCN is providing small rural local exchange carriers with sufficient and predictable universal service support for networks regardless of whether a customer continues to purchase regulated “plain old telephone service.” Today, if a consumer chooses to buy regulated voice and broadband, that loop is eligible for universal service support — but if the same consumer then decides that he or she only wants broadband service and will instead procure unregulated VoIP service or “cut the cord” for voice service altogether, the same loop is no longer eligible for universal service support under current rules. This denial of universal service support absolutely defies consumer preference and makes no sense in a regulatory regime that purports to promote the deployment and adoption of broadband and IP-enabled networks.\(^\text{21}\)

Thus, there are sound economic and policy justifications for adopting such near-term measures to stimulate and sustain investments in IP-enabled networks. The Commission should seek act on these and similar near-term measures as may be developed in this rulemaking with an eye toward both the immediate and long-term benefits they could provide in promoting and sustaining the ongoing IP evolution — all while making sure to hearken back ultimately to the core objectives of protecting consumers, promoting competition, and ensuring universal service.

\(^\text{21}\) Another measure the Commission should examine in short order to stimulate and sustain IP-enabled service deployment is the universal service support for “middle mile” network facilities that carry data between Internet points-of-presence and distant high-cost areas. The substantial costs associated with such transport can place significant pressure on the prices charged to rural consumers, and every indication is that bandwidth demand is only increasing. See, e.g., Cisco’s VNI Forecast Projects the Internet Will Be Four Times as Large in Four Years, Cisco Press Release, May 30, 2012, available at: http://newsroom.cisco.com/press-release-content?type=webcontent&articleId=888280 (citing Internet traffic growth arising from several factors, including growth in the average fixed broadband speed to 34 Mbps by 2016 and the fact that over half of Internet traffic in 2016 is expected to come from Wi-Fi connections). Particularly, in the wake of intercarrier compensation changes that will make it more difficult to deploy and maintain transport networks, the availability of sufficient and predictable support for “middle mile” networks may be critical to ensuring that every American will have reasonably comparable access to broadband and thus be able to participate meaningfully in the IP evolution.
IV. CONCLUSION

For the foregoing reasons, NTCA respectfully requests that the Commission initiate a rulemaking to promote and sustain the evolution of networks to IP. This effort can and should be achieved through a balanced and surgical review of the existing regulatory framework that should be coordinated with state regulators to determine whether specific regulations deter or hinder an IP evolution and the degree to which such regulations might remain necessary or require modification to protect consumers, promote competition, and ensure universal service in an “all-IP world.” Moreover, this effort can and should be accelerated through carefully calibrated, tailored near-term measures that provide greater regulatory certainty and appropriate incentives for the deployment and maintenance of IP-enabled networks.

Respectfully submitted,

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