

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

In the Matter of)
)
Accelerating Wireline Broadband Deployment by) WC Docket No. 17-84
Removing Barriers to Infrastructure Investment)

**EX PARTE COMMENTS OF THE
NATIONAL TELECOMMUNICATIONS
AND INFORMATION ADMINISTRATION**

The National Telecommunications and Information Administration (NTIA), as the President’s principal adviser on domestic and international telecommunications policies, and on behalf of federal agency purchasers of telecommunications services, respectfully comments on the *Notice of Proposed Rulemaking (Notice)* in the above-captioned proceeding.¹ As discussed more fully below, NTIA supports the Commission’s proposals for streamlining the section 214 process by which Title II-regulated carriers may discontinue service. We suggest ways below to ensure that the discontinuance and copper retirement processes can accommodate the needs of federal communications users.²

¹ Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, *Notice of Proposed Rulemaking, Notice of Inquiry, and Request for Comment*, WC Dkt. No. 17-84, FCC 17-37 (rel. Apr. 21, 2017) (*Notice*), available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-37A1_Rcd.pdf. See also Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment, *Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking*, WC Dkt. No. 17-84, FCC-CIRC1711-04 (rel. Oct. 26, 2017) (*Draft Order*), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db1026/DOC-347451A1.pdf.

² See Petition for Reconsideration or Clarification of the National Telecommunications and Information Administration at 12-14, GN Dkt. No. 13-5 (filed Oct. 12, 2016) (NTIA Petition), available at <https://ecfsapi.fcc.gov/file/1012477410931/NTIA%20Pet%20for%20Recon%20101216.pdf>. See also *Notice* ¶¶ 83-84. For convenience, except where noted otherwise, all subsequent citations to “Comments” and “Reply Comments” shall refer to pleading filed in GN Dkt. No. 13-5.

I. INTRODUCTION AND SUMMARY OF POSITION

NTIA has long recognized the economic and social benefits for the nation and its population flowing from a “rapid, efficient, Nation-wide” communications infrastructure, as well as the adverse effects that government regulation can have on infrastructure deployment and innovation.³ We therefore applaud the Commission’s determination to ensure that its service discontinuance and copper replacement rules and procedures do not hinder carriers’ abilities to continue modernizing their networks, including the replacement of time division multiplexed (TDM) services with services that use the Internet Protocol (IP).

As the Commission knows, network modernization will both significantly reduce carriers’ operating and maintenance costs and enable them to expand and enhance the services they can offer subscribers.⁴ The pursuit of those improvements – and the financial benefits they portend – will impel carriers to make the investments to achieve them. We agree with the Commission that a prolonged obligation on carriers to maintain outmoded and sporadically used legacy facilities can unnecessarily consume capital that could be used for network modernization.⁵ Similarly, delay in the Commission’s approval of a section 214 service discontinuance application may slow the rollout of a more efficient, cost-effective, and flexible replacement service. The Commission is thus rightly concerned about the adverse effects that its service discontinuance and copper retirement requirements may have on efficient investment by carriers in their networks and services.

³ See, e.g., NTIA, *The NTIA Infrastructure Report: Telecommunications in the Age of Information* 21-86, 210-259, NTIA Spec. Pub. 91-26 (Oct. 1991). The quotation is from 47 U.S.C. §151.

⁴ See, e.g., Reply Comments of IITF, at 4 (filed Mar. 9, 2015), available at <https://ecfsapi.fcc.gov/file/60001039811.pdf>; Comments of AT&T Services, Inc., at 3-4 (filed Feb. 5, 2015), available at <https://ecfsapi.fcc.gov/file/60001027155.pdf>; Comments of Verizon at 4-8 (filed Feb. 5, 2015), available at <https://ecfsapi.fcc.gov/file/60001027043.pdf>.

⁵ See Notice ¶¶ 58, 93; see also Statement of Chairman Ajit Pai, WC Dkt. No. 17-84, available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-17-37A2.pdf.

Over the past two years, NTIA has described to the Commission how the ongoing network transition will significantly challenge federal agencies' ability to maintain mission critical services.⁶ Ensuring continuity of national security, public safety, and emergency preparedness communications is a paramount concern,⁷ and NTIA has described critical agency activities that may be imperiled by uncoordinated planning for or inability to accommodate changes in the facilities and services that agencies use.⁸ Many federal agencies rely heavily – and will continue to do so for some years – on the TDM and copper-based technologies and services that now face the prospect of being removed from carrier networks on short notice. For example, many of the Federal Aviation Administration's systems, including air traffic control communications, are supported by its "Telecommunications Infrastructure" contract that relies on TDM-based services.

The technology transition will require federal agencies – on a possibly very short timetable – to purchase new IP-compatible customer premises equipment (CPE) or to install new equipment to ensure that agencies' existing CPE and systems can interoperate with IP-based services. In addition, for many current mission-critical operations that only require low capacity circuits (such as 64 kilobits per second), carriers appear likely to offer to federal agencies as replacements only much more costly high capacity IP-based circuits (such as 10 megabits per second).⁹ Thus, the transition will likely bring with it significant operational challenges, including cost increases that federal agencies will have difficulty defraying because of the

⁶ The terms "federal user" and "federal agencies" in this filing include private contractors that procure, assemble, aggregate and manage networks for federal agencies and users.

⁷ Notice ¶ 82.

⁸ See NTIA Petition at 3-4, 7-12; Letter from Assistant Secretary for Communications and Information to FCC Chairman, at 2-3 (filed July 29, 2015) (NTIA 2015 Letter), *available at* <https://ecfsapi.fcc.gov/file/60001119091.pdf>.

⁹ See NTIA 2015 Letter at 2, 3. Special construction charges may also apply where carrier provision of replacement services requires new infrastructure investment. See *id.* at 2.

uncertainties and constraints imposed by the federal budgeting, appropriations, and procurement process. Furthermore, given the wide diversity, large volume, and extensive geographical reach of many agencies' operations, agencies will be capable of transitioning their networks and services only in stages, and only after significant planning, prioritizing, and testing. Federal agencies are thus particularly vulnerable to unanticipated and accelerated network changes.¹⁰

Consultation and cooperation between carriers and their federal customers can mitigate potential problems and, by so doing, reduce the possibility that the imperative need to preserve mission-critical agency operations would unduly slow the technology transition. For these reasons, while the Commission should aggressively reduce or eliminate unjustified regulatory barriers to network evolution, it must also take steps to assure that before a service is discontinued or a facility is retired (1) federal customers are aware of the prospective change and its potential service implications for them, (2) carriers have acquainted themselves with their federal customers' situation and needs, and (3) carriers have taken reasonable steps to ensure that federal users will continue to be served adequately after discontinuance. Specific proposals to further those objectives are discussed below.

II. GRANDFATHERING SHOULD BE A CRITICAL PART OF THE DISCONTINUANCE PROCESS FOR FEDERAL CUSTOMERS.

The *Notice* proposes a number of changes to the Commission's Section 214 service discontinuance procedures in an effort to reduce burdens on carrier applicants. As the Commission notes, any revised service discontinuance rules and procedures must also protect customers – including federal customers.¹¹ The dual goals of reducing burdens on carriers and

¹⁰ See NTIA Petition at 3-4.

¹¹ Section 214 makes clear that “[n]o carrier shall discontinue, reduce or impair service to a community, or part of a community” without prior Commission approval. 47 U.S.C. § 214(a). Congress has made clear that the term “community” does not refer solely to a geographical area,

protecting federal customers can be promoted with some changes to the proposals contained in the *Notice*.

NTIA supports the Commission's proposal to expedite the review and approval of carrier applications to "grandfather" services – "to stop accepting new customers for [a particular] service while maintaining service to existing customers."¹² Because grandfathering does not necessitate a change in existing service for a customer, it does not threaten the disruption that can follow from service discontinuance. At the same time, grandfathering creates a graduated path of change for existing customers – keeping them whole for a time as they explore their options and prepare to adopt alternative service arrangements. This is particularly important for federal customers because of the many barriers they face in altering and upgrading their embedded base of equipment and facilities to match evolutionary changes in carriers' networks and services.

Further, if the grandfathering period is sufficiently long,¹³ grandfathering could provide to federal customers a useful preview of the options available to them after a particular service is discontinued. This would in turn provide both existing customers and the Commission itself with real world experience about the adequacy of alternative services as replacements for grandfathered services after they are discontinued. Grandfathered customers can observe the characteristics and performance of alternative services, and begin testing their adequacy for mission needs, without facing the risks associated with changing services prematurely. Perhaps

but can also include a single physical installation, such as a military base. *See* H.R. Rep. No. 78-69, at 10 (1943).

¹² *Notice* ¶¶ 73-78.

¹³ *Id.* ¶ 85 (proposing that streamlined review of discontinuance applications will be available only where the covered services "have previously been grandfathered for a period no less than 180 days"). Because of the difficulties that federal agencies face in responding to carrier-proposed changes in the services that they use, this interval between the commencement of grandfathering and the filing of a discontinuance application should be significantly longer, on the order of 18 months. This period is in line with the service discontinuance notification provisions in General Services Administration contracts through which many federal agencies procure communications services.

most importantly, as discussed below, carriers and federal customers can use a grandfathering period to conduct good faith discussions to identify any problems that a discontinuance may raise and pursue mutually acceptable solutions. In all of these ways, grandfathering can produce information that will enhance the Commission’s ability to adequately review subsequent discontinuance applications – including affording streamlined treatment of applications for which the grandfathering period reveals no serious problems. The graduated transition path offered by a grandfathering process would help federal customers avoid dislocations from unexpected problems that could result from immediate service discontinuances.

For these reasons, NTIA believes that grandfathering will be a vital part of a streamlined service evolution process.¹⁴ Because grandfathering “allows . . . customers to begin transition planning well in advance of an eventual service discontinuance,”¹⁵ grandfathering should be mandatory for services provided to federal customers. Further, because of the benefits grandfathering confers to federal customers, this requirement should extend to all services received by federal customers, not just the “low-speed legacy services” identified in the *Notice*.¹⁶

To ensure that grandfathering adequately protects federal interests, the Commission should attach a few basic conditions on its use. First, carriers must provide written notice of their intent to grandfather a service or services prior to filing any application. Notice to the affected federal customer is crucial to prevent service disruption. In 2015, for example, a carrier in Texas disconnected an active analog circuit to a Federal Aviation Administration (FAA)

¹⁴ If the Commission does not make grandfathering mandatory for services provided to federal users, as suggested below, NTIA would oppose any streamlining of the Commission’s section 214 discontinuance rules and procedures for such services as applied to federal customers.

¹⁵ Comments of the USTelecom Association at 35, WC Dkt. No. 17-84 (filed June 15, 2017) (USTelecom Comments), available at <https://ecfsapi.fcc.gov/file/10615740512530/USTelecom-Wireline-Infrastructure-Comments-2017-06-15-FINAL.pdf>.

¹⁶ *Notice* ¶¶ 73, 79. Accord Comments of CenturyLink at 44-45, WC Dkt. No. 17-84 (filed June 15, 2017), available at <https://ecfsapi.fcc.gov/file/10615433421021/170615%20CenturyLink%20Comments%20Redacted.pdf>.

installation. Upon investigation, the carrier asserted that notice of discontinuation was provided in October 2014, but such notice was not received by either the FAA or the contractor providing the service.¹⁷

Notice should be sent to the federal account holder(s) for the service to be grandfathered, with a copy to the Office of the Federal Chief Information Officer in the Office of Management and Budget, and to the Department of Defense.¹⁸ The notice should provide, at a minimum, the service(s) involved, the specific geographic area(s) covered (including identification of impacted wire centers), and the dates when grandfathering begins and when the service covered is expected to be discontinued (if known).¹⁹ In addition, to facilitate efficient processing and

¹⁷ A carrier's notice should also inform the account holder that the agency affected may designate an alternative and/or additional point of contact for matters relating to the grandfathered service or any other service for which prior notice is required by sending a written request to the person sending the initial notice.

¹⁸ NTIA will submit a subsequent filing providing the Commission with the exact address at OMB to which notice should be provided. With regard to the Department of Defense, Sections 51.332 and 63.71 of the Commission's Rules currently require carriers to send notifications of proposed copper retirement and service discontinuances to the Defense Department's Special Assistant for Telecommunications. 47 C.F.R. §§ 51.332(b)(4), 63.71(a) (2016), *available at* <https://www.gpo.gov/fdsys/pkg/CFR-2016-title47-vol3/pdf/CFR-2016-title47-vol3-sec51-332.pdf>; <https://www.gpo.gov/fdsys/pkg/CFR-2016-title47-vol3/pdf/CFR-2016-title47-vol3-part63.pdf>. We understand that the Commission proposes to eliminate that notification requirement with respect to retirement of copper facilities. *See Draft Order* ¶ 56. Because the Department of Defense is a major and critical user of telecommunications services, this additional notice continues to be needed. Given changes within that Department, NTIA requests that the Commission retain the aforementioned notification requirements, see *Notice* ¶ 64, and require notice to be delivered to the following: Regulatory Law Office (JALS-RL/IP), U.S. Army Legal Services Agency, 9275 Gunston Road, Suite 1300, Ft. Belvoir, VA 22060.

¹⁹ The Commission should also ensure that carriers maintain the technical capability to provide a service to federal, state, and local agencies in exigent circumstances. For example, during disasters, the Federal Emergency Management Agency and other agencies must order services to provide uninterrupted field office communications and to support operations throughout the response and recovery phases. The Commission has already recognized that TDM-based services should not be discontinued for mission-critical government services "until it is proven that other solutions can meet system requirements for the performance of safety of life and national security missions." *Technology Transitions et al., Order, Report and Order and Further Notice of Proposed Rulemaking, Report and Order, Order and Further Notice of Proposed Rulemaking, Proposal for Ongoing Data Initiative*, GN Dkt. No. 13-5, FCC 14-5, 29

review of notices, the Commission should direct carriers to make the above information available in machine readable form that can be retrieved and processed by a federal account holder.²⁰

The NTIA Petition urged the Commission to use its public interest review of carrier service discontinuance applications to induce carriers to work with their federal customers to identify and attempt to resolve any problems raised by planned discontinuances.²¹

Grandfathering presents an opportunity for those carrier-customer discussions to take place at a more advantageous point in the service evolution process. Accordingly, the Commission should require that when a carrier notifies any federal user of the carrier's intent to grandfather a service, the carrier should begin providing the Department or Agency with information – consistent with the need to protect the confidentiality of sensitive information – about the direction and pace of the carriers network and service changes, including reasonable advance notice about changes to those plans. The customer agencies would in turn identify expert personnel who can provide the carrier with technical information about the customer's communications needs, including the potential effects of the carrier's plans on critical operations.²²

The Commission should then require the carrier, in a subsequent discontinuance application for the grandfathered service, to state (1) whether and to what extent the carrier has

FCC Rcd 1433, 1448, ¶ 42 (rel. Jan. 31, 2014), *available at* <https://ecfsapi.fcc.gov/file/7521070313.pdf>.

²⁰ In addition, the Commission should require carriers to provide in machine readable form the relevant information associated with copper retirement notifications, including wire centers, Common Language Location Identifier (CLLI) codes, and street addresses. These proposals for machine readable information are complimentary to (and in addition to) proposals by carriers to de-emphasize paper reporting. *See* Verizon Request for Clarification, or in the Alternative, Petition for Waiver of Copper Retirement Notification Rules at 1, GN Dkt. No. 13-5 (filed Dec. 15, 2016), *available at* <https://ecfsapi.fcc.gov/file/121598738856/2016%2012%2015%20Verizon%20Network%20Transformation%20Petition%20for%20Clarification%20Waiver%20Copper%20Retirement%20Notification.pdf>.

²¹ NTIA Petition at 12-14

²² *See* NTIA Petition at 12-13.

discussed the proposed network or service change with affected federal customers, and (2) what actions the carrier has taken or what plans it has made, if any, to ensure the continuity of mission-critical agency networks, systems, and services. The Commission would use that information as input for its determination whether it should grant the application in the face of a federal agency's claim of a continuing need for the service to be discontinued.²³ Carrier applications to discontinue services used by federal agencies should not be entitled to streamlined process unless they were previously grandfathered for the minimum period discussed above.²⁴

The above-described process would not burden carriers, which have emphasized that they frequently consult with their major customers. AT&T has stated, for example, that “the challenges associated with transitioning large volumes of services, including ‘critical’ services, can all be overcome by negotiation and coordination between the carrier and the government customer, which is routine for carrier/customer relationships of this size.”²⁵ Similarly, USTelecom asserts that “[i]n the normal course of business, our member companies discuss service changes with their government customers that will impact them well before the changes are implemented.”²⁶

²³ *See id.* at 13-14. The *Notice* asks how the Commission would “measure” carrier compliance with these requirements. *Notice* ¶ 83. NTIA believes the Commission should do so in the same way the Commission determines whether an applicant has satisfied any other factor in the “public interest” analysis of a discontinuance application – by critically assessing the factual claims made in the application and in any oppositions.

²⁴ *See supra* note 13.

²⁵ Comments of AT&T Services, Inc. at 52, WC Dkt. No. 17-84 (filed June 15, 2017), available at <https://ecfsapi.fcc.gov/file/1061582659451/FCC%20Comments%20-%20FINAL.pdf>.

²⁶ USTelecom Comments at 34. We note with appreciation that since NTIA first raised the concerns about the impact of the transition on federal users, USTelecom and a number of individual carriers have directly engaged with NTIA about how best to address the concerns of federal users. Such dialogue is critical, but cannot alone supplant the need for the requirements urged in these comments.

Unfortunately, not all carriers have always been so accommodating. The National Oceanic and Atmospheric Administration, for example, was forced to convert certain circuits in Puerto Rico because the local service provider unilaterally refused to repair any circuit lower than Digital Signal 3. In other cases, service discontinuance notifications were insufficient to support the mission critical needs of federal agency operations.²⁷ By adopting NTIA's proposal, the Commission could establish a "best practice" for all carriers concerning the carrier-customer communications and coordination that should occur when carriers contemplate discontinuing legacy services used by federal customers.²⁸

III. THE COMMISSION SHOULD TAKE STEPS TO PROTECT THE INTEROPERABILITY OF LOW SPEED MODEMS USED BY FEDERAL CUSTOMERS.

In its *Notice*, the Commission did not directly address concerns that NTIA raised about the impact of the transition on the federal government's use of low-speed modems. Although grandfathering will be a key way to address the concerns of federal users, addressing low-speed modems would be a way to further reduce the chance that federal agencies would need to seek to block or slow a carrier's effort to modernize its network or services.

NTIA has informed the Commission that the mission-critical services and activities of many federal agencies – including, for example, the FAA, the National Weather Service, the National Aeronautics and Space Administration, and the Bonneville Power Administration – rely on the ability of network services to interoperate with numerous dial-up modem devices (similar

²⁷ One example of the challenges related to discontinuance notices is discussed on pages 6-7 above. In another instance, a local exchange carrier in North Dakota gave the FAA's contractor only 59 days prior notice of the carrier's plan to discontinue support for an analog circuit to an FAA location. That notice was insufficient for the contractor to obtain pricing for a replacement circuit and for the FAA to locate funding for the circuit upgrade. The contractor was able in that case to negotiate with the carrier to maintain support for the circuit until a replacement solution was provisioned.

²⁸ See USTelecom Comments at 35.

to those identified as “widely adopted low-speed modem devices” in the Commission’s 2016 Order²⁹) deployed throughout federal agency systems. The federal government would face enormous challenges if forced to replace hundreds or thousands of devices (some of them specialized devices), in short order, to ensure the continuity of mission critical communications, after discovering that the devices no longer work.

NTIA therefore urges the Commission to provide reasonable interoperability protection for Customer Premises Equipment (CPE) used by the federal government. The Commission should recall that carriers did not oppose the concept when adopted in 2016; rather, they bridled against a potential obligation with few bounds.³⁰ The Commission can address this legitimate concern by limiting protection, at least in the first instance, to the categories of low-speed modem devices identified in the *2016 Tech Transitions Order*, with the clarifications proposed in the NTIA Petition.³¹ The Commission could also reduce the duration of interoperability protection from the nine-year period adopted in the 2016 Order (but to not less than five years).

²⁹ Technology Transitions *et al.*, *Declaratory Ruling, Second Report and Order, and Order on Reconsideration*, GN Dkt. No. 13-5, FCC 16-90, 31 FCC Rcd 8283, 8341-45, ¶¶ 157-170 (rel. July 15, 2016) (*2016 Tech Transitions Order*) (to qualify for streamlined section 214 approval for a new service, carrier must demonstrate that the new service will be interoperable, until 2025, with a limited set of “widely adopted low-speed modem devices”), *available at* https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-90A1_Rcd.pdf.

³⁰ *See, e.g.* Comments of AT&T, at 12 (filed Oct. 26, 2015) (“providers of replacement services [should not be required to] divine any and all uses that customers may be making of their networks and accommodate such uses in any replacement service”), *available at* <https://ecfsapi.fcc.gov/file/60001330983.pdf>; Comments of Verizon at 13 (filed Oct. 26, 2015) (“provider cannot be expected to know the technical details of all of the potential third party devices that are in the market (or those that are no longer sold but which some customers may still have in their homes)” . . . “Nor should a provider have to ensure that new technology will work with all obsolete devices”), *available at* <https://ecfsapi.fcc.gov/file/60001331000.pdf>. The Commission raises the same concern. *Notice* ¶ 70. Indeed, AT&T proposed the interoperability protection framework adopted in the 2016 Order. Letter from David Talbott, AT&T, to Marlene Dortch, FCC, Attach. at 4-5 (May 31, 2016), *available at* <https://ecfsapi.fcc.gov/file/60002087987.pdf>.

³¹ *2016 Tech Transitions Order*, 31 FCC Rcd at 8342, ¶ 159; NTIA Petition at 7-10. The Commission in the 2016 Order also outlined a process by which the list of protected devices can be altered over time. *2016 Tech Transitions Order*, 31 FCC Rcd at 8342-43, ¶¶ 160-66.

This protection for existing CPE is a critical need for federal agencies that operate nationwide networks of sensors and communications modules.

IV. COPPER RETIREMENT AND NETWORK CHANGE NOTIFICATIONS

The *Notice* proposes to eliminate “some or all of the changes to the copper retirement process” that the Commission added in 2015.³² As NTIA has explained in previous filings, many mission-critical activities that the federal agencies perform depend on communications services delivered over copper-based facilities, including services by competitors using other carriers’ facilities.³³ Although federal modernization efforts continue, federal users’ reliance on copper facilities will continue for some years. To the extent that a copper retirement by an incumbent carrier disables the ability of a competitive carrier to provide service to federal users, a copper retirement could directly – and with little to no notice – undermine mission critical federal functions. NTIA urges the Commission to ensure that any changes to copper retirement policies and procedures are fully consistent with Federal agencies’ ability to continue performing their mission-critical functions.³⁴ NTIA suggests that the Commission seek focused input from the carriers as to how best to ensure that Federal operations are not unexpectedly harmed by a copper retirement.

³² *Notice* ¶¶ 57, 63. See *Technology Transitions et al., Report and Order, Order on Reconsideration, and Further Notice of Proposed Rulemaking*, GN Dkt. No. 13-5, FCC 15-97, 30 FCC Rcd 9372 (rel. Aug. 7, 2015) ¶¶ 12-14, available at https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-97A1.pdf.

³³ See, e.g., NTIA 2015 Letter at 2.

³⁴ Agency concerns about retirement of copper facilities are particularly acute when those facilities will be replaced by wireless infrastructure (which may not replicate the reliability and performance characteristics of wired facilities), or where line-provided electric power is essential. If needed, the Commission must be prepared to delay the retirement of copper facilities serving federal agencies until it determines that such retirement will not impair full performance of mission-critical activities.

CONCLUSION

For the foregoing reasons, NTIA respectfully requests that the Commission adopt the foregoing recommendations.

Respectfully submitted,



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