



UNITED STATES DEPARTMENT OF COMMERCE
The Assistant Secretary for Communications
and Information
Washington, D.C. 20230

July 29, 2015

The Honorable Tom Wheeler
Chairman
Federal Communications Commission
525 12th Street, SW
Washington, D.C. 20005

Re: Technology Transitions, GN Docket No. 13-5

Dear Chairman Wheeler:

As the Federal Communications Commission has noted, the U.S. telecommunications system is in the midst of several technology transitions, including the evolution “from networks based on time-division multiplexed (TDM) circuit-switched voice services running on copper loops to all Internet Protocol (IP) multi-media networks.”¹ The National Telecommunications and Information Administration (NTIA), on behalf of the Administration, fully supports these innovations that are transforming our U.S. communications networks and facilities to meet the demands of an increasingly connected society. The ongoing evolution in our communications networks is producing a more capacious, reliable, resilient, and flexible transmission infrastructure for America’s consumers, businesses, and entrepreneurs. The transition presents an opportunity to support growth and innovation in over-the-top content, applications, and services to fuel the U.S. digital economy for decades to come.

As the Commission is fully aware, a smooth and seamless technology transition requires careful, consistent planning and thoughtful policy decisions. In its November 2014 *Notice*, the Commission proposed a number of beneficial changes to its rules and policies to mitigate the concerns that the transition may present to retail customers and competing telecommunications service providers.² In addition to these key market segments, the Commission should also be aware of – and prepared to address – the challenges that the transition presents for U.S. government departments and agencies, which are among the largest customers of U.S. telecommunications service providers.

¹ Technology Transitions, GN Docket No. 13-5, *Notice of Proposed Rulemaking and Declaratory Ruling*, 29 FCC Rcd 14968, 14969, ¶ 1 (2014) (*Notice*).

² See, e.g., *id.* at 14987-14991, ¶¶ 31-42 (backup power); 14993-14002, ¶¶ 49-78 (retirement of copper loops); 14011-14013, ¶¶ 106-110 (wholesale access by competitive telecommunications providers). See also “FACT SHEET: Chairman Wheeler’s Proposals to Protect Consumers & Promote Competition and Public Safety in the Technology Transitions,” July 10, 2015 (*Fact Sheet*). In the *Notice*, the Commission stated that the term “retail customer” is not limited to residential consumers, but also includes “non-residential users such as businesses and anchor institutions.” *Notice*, 29 FCC Rcd at 14997 n.154. NTIA assumes that the term also includes government agencies.

Most federal agencies rely heavily – and will continue to do so for some years – on TDM and copper-based technologies and services to support their mission-critical communications capabilities, including national security, public safety, and emergency preparedness activities. For example, the bulk of the facilities and services in the Federal Aviation Administration (FAA) Telecommunications Infrastructure (FTI) Program – through which the FAA acquires telecommunications services for the National Airspace System – are currently TDM-based necessitated by the communications interface requirements of the FAA’s current end user systems.³

Given the current reliance on TDM-based facilities and services, an accelerated shift to IP-based services may entail significant, unexpected costs for federal users. At a minimum, the change may require federal agencies to purchase new IP-compatible customer premises equipment (CPE), or to acquire additional equipment or services required for IP technology, to ensure that existing end user systems can operate with IP-based services. Special construction costs can also apply if existing services are discontinued and replacement services require new infrastructure investment. Charging for special construction is a common practice by which carriers pass along to customers the costs of capital investment in the “last mile.”

A significant increase in costs can present unique challenges for federal agencies because of the timeframe and uncertainties inherent in the budgeting, appropriations, and procurement process. Although the volume of IP-based services in agency operations has grown significantly over the last decade, many agencies have not yet budgeted for, or begun to implement, a complete transition to IP services spanning the entire breadth of their enterprise. In fact, budget, acquisition, and technical constraints may force agency migration plans to span a decade or more rather than a few years. Most agencies have not yet ascertained their budgetary needs if the retirement of legacy facilities occurs on a wide scale against an accelerated time frame (e.g., less than 10 years.) Furthermore, given the protracted nature of the agency appropriations process, and negotiations over appropriate levels and priorities for federal spending, there may be significant delay before funding is allocated and disbursed to affected agencies. Even when funding is available, adhering to federal procurement regulations presents obstacles that can inhibit an agency’s ability to upgrade networks, equipment, and services on pace with market developments. And, because of the often mission-critical nature of the services provided by the federal agencies, it is vital that the actual changes to circuits and services (including any discontinuation of particular services and/or functionalities) be made with appropriate planning and testing.

The Administration is currently working to assess the implications of the IP transition for federal agencies. NTIA will keep the Commission apprised of the progress of this work. We urge the Commission to take concrete steps to promote carrier-agency discussions that can lead to options and solutions to address the critical mission needs of federal agencies.

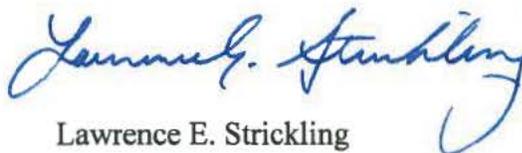
³ See Comments of Harris Corporation in GN Docket No. 13-5, at 2 (filed Mar. 31, 2014) (92 percent of FTI services are TDM-based), available at <http://apps.fcc.gov/ecfs/comment/view?id=6017610234>.

The Commission recently announced plans to establish criteria for comparing replacement and legacy communications services. This will assist in ascertaining whether cessation of legacy services affects a “discontinuance, reduction, or impairment” of service for purposes of Section 214 of the Communications Act.⁴ In that regard, for many deployments, federal agencies need only voice-grade or 64 kilobits per second digital services. Through discussions with carriers, however, some agencies have discovered that the minimum service level offered for an IP-enabled service may be considerably higher, perhaps as high as 10 megabits per second. Such a large change in available service options (if accompanied by a significant change in price) raises discontinuance concerns, but also may call into question a carrier’s compliance with its Section 201 obligation to provide service upon reasonable request and on just and reasonable terms. NTIA intends to monitor subsequent proceedings on this issue closely and will participate actively as necessary to protect the interests of federal agencies and other consumers.

More broadly, it is vital that federal agencies be able to make budgetary and technical plans – often years in advance – prioritizing which facilities and geographical areas will need to migrate to adapt to technical changes in a dynamic communications marketplace. Some agencies have thousands of sites spread across the country supporting critical services and missions (such as FAA, the National Weather Service, and the Department of Defense). For example, the Department of Defense’s mission critical footprint spans an array of U.S. installations from sites supporting a single navigational aid to the remote Creech Air Force base in the southern Nevada desert to the Navy’s large complex of installations at Norfolk, Virginia. These agencies cannot convert all of their sites without appropriate, advanced planning, and also cannot be subject to unpredictable sequencing, timing, and expenditures regarding the sites to be converted. We look forward to working with you, and with the carriers, to explore a process in which the transition can be appropriately structured so as to simultaneously allow careful planning while supporting continued growth and innovation in our communications networks.

Thank you for considering these points and please let me know if you have any questions.

Respectfully submitted,



Lawrence E. Strickling

cc: The Honorable Mignon Clyburn, Commissioner
The Honorable Jessica Rosenworcel, Commissioner
The Honorable Ajit Pai, Commissioner
The Honorable Michael O’Rielly, Commissioner

⁴ See *Fact Sheet* at 2.