

IP Transitions Issue Brief

SUMMARY

The IP transition—i.e., the switch from copper-based, circuit-switched analog networks and services to optical fiber and coaxial cable—could enable all kinds of new services and products, including greater broadband deployment. New networks could even help modernize our nation's electricity system, empowering consumers with greater control over their usage. If not done carefully, however, it could also result in unintended consequences, as these new networks may not be as reliable as the technologies they are replacing.

UTC POSITION

This is particularly acute for energy utilities, most of whom operate their own private telecommunications networks. Utility telecommunications networks enable greater reliability and faster recovery from natural disasters as well as more efficiencies within their service territories. These networks are generally more reliable than the commercial systems operated by telecommunications firms as they are necessary to keep the lights on each and every day. The Utilities Technology Council (UTC), therefore, is concerned that the IP transition could lead to increased cost and reliability issues for utilities if poorly managed.

The new fiber services may not provide the same level of reliability, particularly with regard to back up power and latency. These replacement services can be significantly more expensive than the legacy services already in use. Telecommunications carriers may also discontinue services altogether, particularly in rural and remote areas, which would threaten to cut off communications to critical assets, such as electric substations.

Over the last several years, the Federal Communications Commission (FCC) has initiated proceedings into managing the IP transition. UTC and other stakeholders have urged the commission to require carriers to provide more time for utilities to transition

from legacy services. Unfortunately, the FCC over the last year has proposed to shorten timeframes and reduce other regulations on telecommunications firms to notify their customers—including utilities—on the discontinuation of legacy services.

BACKGROUND

In August 2017, the FCC proposed new rules that roll back advance notice requirements for copper replacements and service discontinuance that had been previously established. If finalized, the rules would reduce the time period from 180 days to 90 days for providing customers advance notice of any copper retirements, which would begin from the date that the FCC issues a public notice regarding the copper replacement.

For discontinuances of low-speed legacy services (speeds less than 1.544 mbps), the draft order would reduce the public comment period to 10 days and provide an automatic grant period of 25 days for all carriers seeking to grandfather legacy low-speed services for existing customers.

The draft proposal would reduce the timelines for discontinuance of services that are less than 25/3 mbps, so that they would be subject to a public comment period of 10 days and an auto-grant period of 25 days for all carriers submitting such applications. Such services would need to be grandfathered for a period of no less than 180 days before a carrier may submit an application.

The FCC also is considering measuring the time period for short term notifications to start from the date the carrier provides notice, instead of the date that the commission issues its notice. Similarly, the draft would eliminate the notice requirement for network changes affecting interoperability of customer premises equipment. Moreover, it would apply the copper replacement notification requirements for *force majeure* events to apply to all network changes. And it would forbear from requiring any notification for discontinuance of *all* services that have no existing customers, not just the ones with speeds

lower than 1.544 mbps. The FCC also proposes to let carriers discontinue legacy voice services if the carrier shows that it offers VoIP or an alternative voice service in the area.

UTC COMMENTS

UTC and its members welcome the IP transition, as new technologies could transform how people communicate and give them more control over their energy consumption. Still, given that many of these technologies do not yet provide the same level of reliable service as the networks they are replacing—and because many utilities use these legacy systems for mission-critical needs—managing the IP transition must be done carefully.

Telecommunications carriers should provide utilities with more advance notice prior to a copper replacement or prior to discontinuing service as part of the IP transition. Utilities may have hundreds, if not thousands, of leased line circuits from the carriers, and transitioning those circuits is a highly complex process that may involve multiple carriers across multiple states. Further, the replacement services offered by the carriers may not provide the same performance quality as the legacy TDM service in terms of reliability, security and resiliency. This transition may impose significant costs on utilities, requiring advance notice and planning.

UTC is concerned about the elimination of advance notice of *de facto* discontinuance of services, because carriers are letting their networks degrade, especially in rural areas where utilities lease circuits that they need for substation monitoring and control, as well as protective relaying and other mission critical applications. UTC also opposed the elimination of the requirement that carriers provide direct notice to customers, prior to replacing their legacy copper

networks. Finally, UTC warned against eliminating requirements that direct carriers to provide notice prior to changes that would affect the interoperability of customer premise equipment.

With regard to discontinuance of service, UTC opposed reducing the time period for comments and for auto-grant of applications to discontinue services, including voice and data services that were previously grandfathered by the carriers.

Removing these consumer protections, and streamlining the “adequate replacement” test would leave customers with nothing but VoIP or some other inadequate replacement service that would not provide sufficient reliability for mission critical applications.

ABOUT UTC

The Utilities Technology Council (UTC) is a global trade association dedicated to serving critical infrastructure providers. Through advocacy, education and collaboration, UTC creates a favorable business, regulatory and technological environment for companies that own, manage or provide critical tele-communications systems in support of their core business.

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