

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

In the Matter of	)	
	)	
NOTICE OF PROPOSED RULEMAKING	)	PS Docket No. 14-174,
AND DECLARATORY RULING:	)	GN Docket No. 13-5,
"Ensuring Customer Premises	)	RM-11358,
Equipment Backup Power;	)	WC Docket No. 05-25,
Technology Transitions;	)	RM-10593
Copper Retirement; and	)	
Discontinuance of Service"	)	
	)	

**COMMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

**I. INTRODUCTION AND SUMMARY**

The Telecommunications Industry Association (“TIA”)<sup>1</sup> hereby submits comments to the Federal Communications Commission (“Commission”) in the above-captioned proceeding.<sup>2</sup>

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<sup>1</sup> TIA represents the global information and communications technology (ICT) industry through standards development, advocacy, tradeshows, business opportunities, market intelligence, and world-wide environmental regulatory analysis. Its hundreds of member companies manufacture or supply the products and services used to provide broadband and broadband-enabled applications. Since 1924, TIA has enhanced the business environment for broadband, mobile wireless, information technology, networks, cable, satellite, and unified communications. TIA’s standards committees create consensus-based voluntary standards for numerous facets of the ICT industry.

<sup>2</sup> See, NOTICE OF PROPOSED RULEMAKING AND DECLARATORY RULING - “Ensuring Customer Premises Equipment Backup Power; Technology Transitions; Copper Retirement; and Discontinuance of Service” PS Docket No. 14-174, GN Docket No. 13-5, RM-11358, WC Docket No. 05-25, RM-10593 FCC 14-185 (Rel. 2014) (“Public Notice” or “NPRM”)

The Commission has shown foresight by ensuring that the inevitable transition of legacy transmission platforms and technologies to Internet Protocols (“IP”) networks occur in an organized and orderly fashion. TIA concurs with Chairman Wheeler’s assessment of the importance when implementing a transition from time-division multiplexing (“TDM”) networks to IP networks to also preserve the Commission’s “enduring values” of the “Network Compact.”<sup>3</sup>

TIA’s annual research confirms that a comprehensive review of the transition to IP networks is warranted as service providers roll out new technology and consumers and businesses increasingly choose to replace legacy services with IP alternatives. Each year TIA’s Market Review & Forecast publication analyzes a wide range of data, weighing economic, technology and policy drivers, with specific data on industry segments, including wireless data, wireline data, conferencing services, wired internet access, network equipment and more. This data confirms the speed with which the network transition is taking place and underscores the benefits associated with enabling the network transition as reflected by customer adoption.<sup>4</sup>

- In the voice services market, circuit-switched spending fell 6.7 percent in 2013. (TIA MR&F 3-3)

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<sup>3</sup> See, The preservation of the “four enduring values that have always informed ...see Statement from FCC Chairman Tom Wheeler on Technology Transition Experiments, found at: [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2014/db0221/DOC-325728A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0221/DOC-325728A1.pdf) (Released on Feb. 21, 2014) (defining the Network Compact’s enduring values as “universal service, public safety, competition and consumer protection)

<sup>4</sup> This data, as well as all other projections and statistics provided in this document which are not cited to otherwise, are derived from the TIA’s 2014-2017 ICT Market Review & Forecast (TIA MR&F), a proprietary annual publication from TIA containing distilled data and analysis on information and communications technology industry trends and market forecasts through the end of 2017. This document is available for purchase at <http://www.tiaonline.org/resources/market-forecast/>.

- Circuit switched spending will decrease from \$111.6 billion in 2013 to \$95.4 billion in 2017, a 3.8 percent decline compounded annually. VoIP spending will rise from \$20.6 billion to \$30.9 billion, a 10.7 percent compound annual increase.
- In 2013, there were 79 percent as many residential VoIP subscribers as circuit-switched subscribers, triple the 28 percent share in 2009.
- By 2017, the VoIP residential subscriber base will be nearly 25 percent larger than the circuit-switched subscriber base. (TIA MR&F 3-0)

These findings are mirrored by other data:

- According to the FCC’s own data, at the end of 2013 VoIP slightly exceeded circuit switched for residential VoIP<sup>5</sup> -
- The Center for Disease Control’s annual survey found that 44% of households are now wireless only <sup>6</sup>-

As discussed in greater detail below, substantial benefits accrue from the policies encouraging the timely investment in the country’s telecommunications network. The appropriate consideration of the potential challenges or inconveniences associated with the transitions should be balanced with a recognition of the very significant benefits from the transition. In short, TIA supports efforts to stimulate investment and innovation in next-generation broadband deployment and adoption.

As the FCC considers how best to facilitate the transition to IP platforms, its review should be guided by clearly articulated goals:

- Encouraging investment in intelligent network infrastructure, including accelerating broadband infrastructure investment;
- Fostering competition in the IP industry;

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<sup>5</sup> See, FCC Industry Analysis and Technology Division, “Local Telephone Competition: Status as of December 31, 2013” (October 2014), Table 2, available at [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-329975A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-329975A1.pdf)

<sup>6</sup> See, "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January–June 2014" U.S. Department of Health and Human Services • Centers for Disease Control and Prevention; National Center for Health Statistics; Stephen J. Blumberg, Ph.D., and Julian V. Luke (Released: 12/2014) (“Wireless Substitution”) available at <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201412.pdf> (last accessed February 4, 2015)

- Ameliorating any adverse effects of the transition on consumers or competition in the IP industry;
- Allowing the market to reflect consumer choice, rather than the having the government dictate consumer choice.

As TIA previously noted, “obsolescence continues to be a major driver of the transition.

Legacy TDM platforms are typically already approaching a 40 year plus lifespan. Essential expertise and equipment spares are becoming scarce. Should an original vendor no longer be in business and if no alternative support or spares are available, then carriers can be forced to migrate from their legacy silo model to a new voice platform.”<sup>7</sup>

## **II. FCC’S TRANSITION PROCESS SHOULD BE GUIDED BY CORE POLICY OBJECTIVES.**

### **A. IP Transition Timing Should Be Driven By Market Forces.**

IP transition timing should be left to the market-based economic considerations of carriers. Investment decisions are appropriately left to individual companies weighing competing considerations and limited resources. The specific decisions as to when and where to transition to all-IP and away from legacy copper infrastructure is fundamentally an investment decision of resource allocation. Carriers contending with higher maintenance, electricity, and cooling costs associated with legacy equipment already have strong incentives to make appropriate technology transitions as quickly as feasible. At the most granular level, carriers routinely weigh the availability of spare parts repurposed from other equipment with the advantages cost of investment in new facilities.

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<sup>7</sup> See, TIA Comment at 5, Technology Transitions Policy Task Force Seeks Comment on Potential Trials, Docket No. 13-5 (filed July 8, 2013) “TIA Comment”.

**B. Policies Need to Take into Account Continuity for Vital Services.**

Some critical infrastructure systems rely on the PSTN for services and applications, and these essential functions must be provided an appropriate transition path so that key safety services can continue to function and are not stranded. The FCC should not prolong the nation’s reliance on legacy copper based services or frustrate the ability of providers to choose the most efficient solutions for serving consumers. However, it is essential that appropriate measures are taken by all parties in order to assure the continuity of critical communications dependent functions for a reasonable period of time.

**C. Mandatory Carrier-supplied Back-up Power Requirements are Not Appropriate**

In considering whether to mandate back-up power requirements, the Commission should take into account that consumers in large numbers have already opted for services that do not which is not dependent on carrier-furnished power. As previously noted, 44% of consumers have already “cut the cord, with trends suggesting a majority will have done so within a very short time.”<sup>8</sup> These mobile consumers already fully appreciate the need to “manage” the power capacity of their devices and do so daily. Consumers understand the trade-offs between legacy devices that did not require their being involved in “powering” them and mobile and non-tethered services. In dramatic numbers, users are expressing their marketplace preference for communications services and equipment that require their involvement with power storage.

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<sup>8</sup> See footnote 6, “Wireless Substitution”

## D. Copper Retirement

The NPPRM questions whether it “should play in any sale or auction of copper, including whether the Commission should establish rules requiring incumbent LECs to make a good faith effort to sell their copper networks before retiring the facilities.”<sup>9</sup> As noted in the NPRM, one carrier made a suggested it would “possibly” sell its copper to competitors on an “as is basis.” Scant detail is attached to this. In fact, the offer proposal referenced appears to be contained in a single PowerPoint slide contained in an ex parte presentation.<sup>10</sup>

There are numerous questions that would need to be addressed. Basic questions include, what would be the copper purchasers’ obligations? Would the purchasers be required to be or become common carriers? What obligations, if any, would the seller continue to have? Would the FCC or state regulators have a role in setting the price if the parties are unable to come to terms? Would there be a market for “small area discontinuations?” Given the existing difficulty for carriers in maintaining legacy networks that depend on obsolete equipment that is no longer being manufactured or supported, TIA is skeptical of the ability of new entrants to take over the operation of these copper networks that would otherwise be retired.

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<sup>9</sup> See, NPRM at para 87

<sup>10</sup> See Letter from Robert C. Barber, Attorney, AT&T, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 12-253, et al., at 14 (filed May 30, 2014). Attachment: “Unbundled Network Elements Loops May 2014 “ available at <http://apps.fcc.gov/ecfs/document/view?id=7521154234>)

Even more important, though, is the potential delay in new facilities investment that an abandoned copper regime would produce. On January 29th, the FCC issued its 2015 Broadband Progress Report stating that broadband deployment is failing to keep pace with today's advanced, high-quality voice, data, graphics and video offerings. Concluding that the 4Mbps down/1Mbps up standard set as recently as 2010 has now become inadequate, the Commission raised the benchmark to 25Mbps down/3Mbps up.<sup>11</sup> Achieving a desired more than 600% increase in download speeds will require the telecommunications industry to maintain a very robust investment pace. Requiring that copper that would otherwise be retired be made available for purchase at possibly fire sale prices introduces significant uncertainty to investment decision-making. The Commission should avoid creating this uncertainty because it will delay the broadband infrastructure investment that its own policies have identified as a national priority.

### **III. Declaratory Ruling: Policies Governing Transitioned Services**

Uncertainty impedes investment. The likely consequence of the Commission's declaratory ruling is the creation of a very significant new regulatory hurdle for the technology transition. Lack of clarity about whether a new investment might also be ruled a service discontinuance requiring prior Commission approval operates as a disincentive to investing in fiber or other new technologies.

The Commission's National Broadband Plan has previously highlighted the problems associated with the extended continuation of legacy networks. The Commission noted this not

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<sup>11</sup> See, Fourth International Broadband Data Report (2015); FCC FINDS U.S. BROADBAND DEPLOYMENT NOT KEEPING PACE: Updates Broadband Speed Benchmark to 25Mbps/3 Mbps to Reflect Consumer Demand, Advances in Technology, Adopted January 29, 2015 (Report Rel. February 4, 2015)

only risks stranding that ongoing investment, but that it “siphon[s] investments away from new networks and services.”<sup>12</sup> The Plan highlighted the costs of “requiring an incumbent to maintain two networks,” and recommended the Commission “ensure that legacy regulations and services did not become a drag on the transition to a more modern and efficient use of resources.”<sup>13</sup> Policies which inhibit investment undermine the nation’s important broadband objectives.

As a standard for determining the appropriateness of continuing legacy regulatory requirements, TIA has advocated an approach that focuses on the “substance” of a service over the regulatory “form.” Regulatory “substance” includes requirements actually impacting an end user’s expectation regarding service availability and performance. Regulatory “form” may involve metrics of a service’s technical attributes associated with a specific technology.<sup>14</sup> The approach also reflects the Commission’s long-standing policy of technology neutrality, of identifying key service requirements in a manner that does not dictate the use of a specific technology.

Appropriate consideration needs to be given that equipment that has exceeded their anticipated life cycle will inevitably become less reliable with age. Alternative technologies can exceed the performance of these deteriorating legacy investments. Equipment that has exceeded its anticipated life cycle will inevitably become less reliable with age; alternative technologies can exceed the performance of these deteriorating legacy investments.

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<sup>12</sup> See, Federal Communications Commission, *Connecting America: The National Broadband Plan*, at 49, 59 (2010).

<sup>13</sup> *Id.* at 59.

<sup>14</sup> See, TIA Comment at 6-7.

Obtaining public comment on this would have been appropriate. Additionally, the previously authorized IP-transition trials are an opportunity to furnish more guidance to the Commission regarding the consequences of service discontinuation.<sup>15</sup> The Commission should ensure that its policies do not prolong the nation's reliance on legacy copper-based services or frustrate the ability of providers to choose the most efficient solutions for serving consumers.

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<sup>15</sup> See, Technology Transitions Policy Task Force Seeks Comment on Potential Trials, FCC Docket No. 13-5

#### **IV. CONCLUSION**

TIA concurs with the Commission's goal promoting a tech transition, while preserving services. However we caution the Commission to be more sensitive to the inevitable "trade-offs" existing between spending required by regulation to preserve legacy technology, and investing in next-generation networks. Such spending to maintain copper infrastructure comes at the expense of new investment.

Respectfully submitted,

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