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

In the Matter of:

Ensuring Customer Premises Equipment Backup Power for Continuity of Communications	)	PS Docket No. 14-174
Technology Transitions	)	GN Docket No. 13-5
Policies and Rules Governing Retirement Of Copper Loops by Incumbent Local Exchange Carriers	)	RM-11358
Special Access 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

Comments of Roslyn Layton[1]

March 9, 2015

These comments are offered in response to the Notice of Proposed Rulemaking. Being an American based at a Danish university and working with telecom scholars from around the world, I offer a global perspective. At my university I have the opportunity to study with leading telecom regulation scholars including William Melody,[2] an economist who worked at the FCC at the time of the breakup of the AT&T monopoly and the founding director of LIRNE, a cross-national academic collaboration to

[1] I am an American citizen working as a Ph.D. Fellow at the Center for Communication, Media and Information Studies at Aalborg University in Denmark. The topic of my research is to test the validity of the FCC's "virtuous circle of innovation". I am also a Visiting Fellow at the American Enterprise Institute and a Vice President at Strand Consult. These comments are my own. More information about me is available at http://roslynlayton.com/about/.
Measuring the Information Society Report (International Telecommunications Union (ITU), 2014), http://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2014/MIS2014_without_Annex_4.pdf.
[2] http://www.itu.int/en/ITU-T/academia/kaleidoscope/2013/Pages/MelodyW.aspx

facilitate telecom reform and information infrastructure development. An alumna of my department is Lara Srivastava, editor of the *10th Anniversary Telecommunications Regulation Handbook*.[3]

Protecting Consumers' Ability to Call 911 during a Power Outage

The FCC proposes to require service providers to provide a power backup for losses of power in emergencies. There is no doubt that emergency preparedness is an important topic which deserves attention, but it is not clear to what extent backup power for devices is an issue worthy of regulation.

This NPRM is written as if consumers never contemplate emergencies, have experienced power outages, and don't take steps to prepare themselves. The FCC provides little evidence of the problem, save for a link to a workshop on technology transition and public safety in April 2014. It does not appear that backup power for mobile phones was even a major item on the agenda of that workshop. Even if there were an issue to regulate, it's not even logical that service providers should be required to provide backup power. The phone manufacturer may be the better party on which to place the requirement.

In any case there are many issues that make this requirement impractical. Frequently in emergency situations, people are away from their home or car. They would not carry a backup power source with them even if the FCC required the service provider to offer it. If having power to run a cell phone is the issue, then having a longer battery life would be a better solution. Moreover a cheap, easy fix is simply to install fewer apps on the phone—fewer apps on the phone preserve battery life, and consumers use only a fraction of the apps on their phones.

It seems that the FCC has not contemplated this question very well. This item on the NPRM appears to get its justification from a series of filings from Public Knowledge, an advocacy organization which may represent a small subset of consumers. To be sure, consumers have wide-ranging, if not varied and conflicting interests. Many consumers want best in class technologies at the lowest possible prices and would not care if the entire telephone system disappeared tomorrow.

Before the FCC makes rules, it should study the issues. Common sense suggests that buying phone chargers would be part of the normal emergency preparedness. I grew up in Florida, America's 3rd most populous state, a state whose residents are accustomed to tornados and tropical storms and where power outages are not uncommon. Residents are accustomed to purchasing supplies, including back up power sources. The Florida Division of Emergency Management offers guidance on emergency

Regulation should only be applied if there is a market failure or if the benefit of such a regulation so greatly outweighed the cost. Given that such phone chargers are widely available (powered by battery,

[3] Colin Blackman and Lara Srivastava, *10th Anniversary Telecommunications Regulation Handbook*, vol. March 2011 (infoDev | The World Bank | The International Telecommunication Union, n.d.), http://www.infodev.org/articles/10th-anniversary-telecommunications-regulation-handbook.

solar, hand turned-crank etc) and cost as little as $5, it hardly seems justified to require operators to provide them. There is no evidence that people are failing to buy emergency backup solutions or that operators are obstructing this important step in emergency preparedness.

While it is certainly a good idea that consumers have backup power in their homes to power essential devices in the event of emergency, placing this requirement on service providers is not the way to go. Should a requirement be placed on service providers, the cost will be borne by users through higher prices. Increased mobile prices adversely impact people of low-income. A recent study from the Tax Foundation[4] notes that the average rate of taxes and fees on wireless telephone service alone are already more than two times higher than the average sales tax rates that apply to most other taxable goods and services. Seven states have combined tax rates that exceed 20 percent of the total price of the service.

If the FCC is so concerned about compliance, it could offer a rebate plan in which consumers submit their receipt of purchase of power backup to the FCC, and then the FCC could send consumers a check for a reduction in the 911 taxes they have to pay. The FCC could also offer a prize for ways to extend battery life.

At best, this request looks like the FCC trying to be relevant where other state and federal agencies have the issue covered. At worst, it appears that the FCC is trying to expand the scope of 911 services to regulate unnecessarily.

Increased Transparency to Empower and Protect Consumers During Transitions

There is no doubt that communication is important to educate consumers in the shift to an all Internet-Protocol (IP) world. If anything the market evidence suggests that consumers are moving in the general direction of the IP transition without significant problem. Mobile telephony has been adopted faster than any other technology. Most people around the world will experience the Internet first and only via mobile technologies. If anything, industry is ahead of the curve; service providers offer increasig speeds faster that consumers demand them.

Small and medium sized companies upgrade to their processes and network connections as their business necessitates. While I have not published a paper on the topic, I observe anecdotally that businesses frequently have better communication network options than consumers because business class service is less regulated.

It is a fact that a small segment of America's population fails to adopt new technologies and network services because they don't find the relevance for it. In the guise of "protecting" this small and dwindling group, the Commission appears to require that service providers maintain two sets of networks, the plain old telephone network and next generation mobile and/or fiber technologies.

[4] http://taxfoundation.org/article/wireless-taxation-united-states-2014

Such a requirement increases the costs for all users, not least of which plain old telephone users who suffer from increasing costs across a dwindling user base, making telephony increasing expensive versus mobile options. It would make far more sense to offer laggards incentives to adopt new technologies, provide outreach to them, and so on. There is no market failure here. This proposal appears to be the application of regulation for its own sake.

The FCC can study the IP transition in Denmark, which just topped South Korea in the ICT Development Index[5] calculated by the International Telecommunications Union, earning the status as the world's most digital nation. This is a country which offers a digital signature program, a single sign on for all health, banking, and government services,[6] and almost ten percent of the population connects to the Internet only with a mobile device.

Digitization in Denmark is driven by high labor cost. Some two decades ago paper checks were phased out in favor of electronic transfer; it simply costs too much to pay people to be tellers in banks. Communication with municipalities is done electronically for the most part.[7] There is no one sitting at the county office to answer the telephone, and almost no paper letters are generated by municipalities anymore. The IP transition in Denmark mirrors the larger evolution of the public sector in Denmark, a recognition that quality must be maintained but at a lower cost and with lower head count in future. Those who do not have digital skills get help from friends and family members and learn skills at classes offered at community centers and libraries.

Denmark is worth noting because its telecom sector is relatively unregulated compared to other sectors. The telecom market is so competitive that the telecom regulator was dismantled by the center left government four years ago.[8] Danes enjoy one of the highest rates of telecom investment per capita as a result, approaching the level of the US. Wisely the Danish leadership realized that micromanaging communications networks adds little value to society. Highly skilled telecom experts are better deployed in other government agencies where they can advise on how to enable broadband in the health, transportation, education, and other sectors.

Denmark's Productivity Commission[9] observes that government targets for broadband speeds are inconsistent with a market-led, technology-neutral broadband policy. Indeed, consumers choose what level is important to them with the speeds they buy and the applications and services they use. A government standard is not irrelevant, it is counterproductive.

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[5] *Measuring the Information Society Report* (International Telecommunications Union (ITU), 2014), http://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2014/MIS2014_without_Annex_4.pdf.
[6] http://www.digst.dk/Servicemenu/English/About-the-Danish-Agency-for-Digitisation
[7] http://www.digst.dk/Servicemenu/English/Policy-and-Strategy/eGOV-strategy
[8] Anders Henten and Morten Falch, "The Future of Telecom Regulation: The Case of Denmark," June 2014, http://vbn.aau.dk/en/publications/the-future-of-telecom-regulation(87df5174-0a28-4865-b5a4-5f4bf2c758f5).html.
[h]ttp://produktivitetskommissionen.dk/media/160574/Rapport%205%20-%20Infrastruktur.pdf

Americans can avail themselves to next generation technologies and all their benefits, including vital and important improvement to healthcare delivery, education, transportation, and so on. The success of the transition to date is underscored by the projection that nearly half of Americans will work from home at least some of the time by 2016.[10]

It is true that by shedding telephone networks that it will not be possible to send a traditional fax, however new networks enable more and better technologies. America, for all its dynamism and innovation, could not have possibly contemplated, let alone desired, preserving every feature from each technology transition. Freeways that enable cars cannot be used for horse and buggies. If anything, new networks make services even better, such as high definition voice, a boon for the hearing impaired.

Preserving Competition by Maintaining Wholesale Access

The point of wholesale market is to sell surplus capacity. Ostensibly service providers will have even more capacity when they upgrade their networks, so theoretically they would increase their wholesale offering. Meanwhile one the purported goal of regulating wholesale access is to enable entrant to develop their own networks, or at least significant elements.[11]

It is not the goal of regulation to keep companies buying wholesale access alive. If technology change results in users no longer wanting a product or service, it is not the goal of regulation to maintain firms on outdated technologies. The FCC did not provide subsidies to the newspaper industry when the Internet decimated their business model. If firms buying wholesale access don't know that an IP transition is underway, then they shouldn't be in business.

While I don't doubt that the FCC has many well-meaning employees, this notice exemplifies troubling overreach. This notice suggests a number of unnecessary requirements and un-evidenced claims. It borders on command and control central planning of communications. The evidence of that model was shown when the Iron Curtain was lifted: a complex of one hundred apartments shared a single telephone. There is a dangerous trend at the FCC which increasingly wants to micromanage networks, evidenced most recently by the decision to classify broadband under Title II. This decision should rightly be challenged in court for many reasons, not the least of which is the FCC's unjustified overreach.

America's robust broadband based economy is the envy of the world. Americans, just 4 percent of the world's population, have enjoyed nearly a quarter of the world's investment in communications networks.[12] This has been achieved in no small part to limited regulatory participation in mobile,

[10] https://www.forrester.com/US+Telecommuting+Forecast+2009+To+2016/fulltext/-/E-RES46635?isTurnHighlighting=false&highlightTerm=US%20telecommuting&al=0

[11] See generally Martin Cave's Ladder of Investment Theory

[12] Michael Horney and Roslyn Layton, *Innovation, Investment and Competition in Broadband and the Impact on America's Digital Economy* (Mercatus Center at George Mason University, August 15, 2014), http://mercatus.org/sites/default/files/Layton-Competitionin-Broadband.pdf.

wireless and fiber-based technologies. Americans on their own accord adopt the technologies as they choose and avail themselves to many kinds of services.

It should not be the expectation of the FCC or anyone that all functions of the telephone network be preserved. If those technologies are desired, firms will meet the demand. The FCC should not play the role of deciding which technologies consumers use and how they use them.

The FCC purports to act in the consumer interest, but some aspect of this NPRM seem to exaggerate minor issues to increase justification for regulation. The NPRM fails to show that the FCC has a larger grasp on the bigger picture: supporting the framework that incentivizes investment in next generation networks, something which overall provides far greater consumer benefit. Of great consumer interest is a vital telecom sector in which firms can invest, earn profits, and innovate.

Innovation, more than regulation, delivers human progress and welfare. The FCC should remember to be humble and modest in this regard.