



January 15, 2014

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th St. SW  
Washington, DC 20554

Re: GN Docket No. 12-353, Comment Sought on the Technological Transition of the Nation's Communications Infrastructure; GN Docket No. 13-5, Technology Transitions Policy Task Force

Dear Ms. Dortch:

On January 13, Harold Feld, John Bergmayer, and Anna Sallstrom of Public Knowledge (PK) met with Acting General Counsel Jon Sallet and Associate General Counsel Stephanie Weiner. PK argued that the technical trials of the transition of the PSTN from circuit-switched to packet-switched IP technology should proceed with responsible safety measures and controls.

PK presented a report that was prepared for PK pro bono by CTC Technology & Energy, an engineering and consulting firm that does not have a financial stake in the outcome of the PSTN transition. This report describes a floor for how to conduct adequate trials. It identifies ten key attributes of the network that will require particular testing and presents industry best practices for each, including (1) network capacity, (2) call quality, (3) device interoperability, (4) service for the deaf and disabled, (5) system availability, (6) PSAP and 9-1-1 service, (7) cybersecurity, (8) call persistence, (9) call functionality, and (10) wireline coverage.

PK noted that the transition to packet-switched IP technology is a fundamental change to the architecture of the PSTN. Recent system failures like Fire Island and the AT&T U-Verse outage show the potential disruptions that changes to this complex system can create. This is not to say that the IP transition should not take place. Rather, the transition should be approached deliberately: the Commission should take responsibility for providing oversight of the process and presenting a clear path forward that protects end-users. PK believes that because small- and mid-sized businesses are disproportionately reliant on copper-based technologies, they will face particularly high upgrade costs and risk of disruption.

PK argued that participation in the trial should be voluntary, not mandatory, and suggested that carriers could achieve sufficient participation by offering free or discounted service as an incentive. It noted that structuring the trials this way would simplify them and reduce the risk of disruption to end-users by allowing those with complex technical problems, like small businesses reliant on older technologies like fax machines or consumers with medical monitoring devices, to enter at later phases of the study. PK also observed that voluntary participation removes the need for a waiver under Section 214(a) of the Communications Act, under which “[n]o carrier shall discontinue, reduce, or impair service to a community, or part of a community” without first obtaining a waiver from the Commission. This is because if participation in the trial is voluntary to both new and existing customers and participants remain free to opt out, the existing infrastructure must remain in place, and therefore service has not been “discontinue[d], reduce[d] or impaire[d]” and Section 214(a) is inapplicable.

A goal of the trials, PK argued, should be to establish a checklist of important points that are required for a successful transition to IP technology. This checklist would help manage the

eventual conversion of the entire network safely and efficiently. PK observed that this checklist would also help the Commission when, in the course of that conversion, it faces requests for Section 214 waivers: the Commission could use the checklist to assess whether the requesting carrier has completed a safe transition.

PK believes that the FCC, not any private company, should be in charge of the conduct of the trials. Only an entity without a stake in the outcome of the trials or the performance of a particular technology will have an objective point of view, which is necessary to ensure that any experiments are conducted as real experiments. The agency should determine the ground rules, determine what kinds of information to collect, and, importantly, have the ability to roll the trials back if the circumstances warrant. But to help the FCC do its job, private companies need to bring the agency specific, detailed proposals as to the trials. In particular, AT&T, which would benefit disproportionately from a transition of the PSTN from TDM to IP technology, should bear a higher burden in describing how it plans to conduct the trials, and what factors it intends to test.

Finally, PK emphasized that the technical questions the trial addresses are separate from the policy questions that the Commission also faces. The goal of the trials should be to ensure that new technologies can support the values and policy choices that we make—the trials will not help us determine what those are.

Respectfully submitted,

/s Anna Sallstrom  
Law Clerk  
Public Knowledge