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

In the Matter of

Technological Transition of the Nation’s Communications Infrastructure

GN Docket No. 12-353

REPLY COMMENTS OF PUBLIC KNOWLEDGE

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SUMMARY

In this proceeding, the Commission has already seen many stakeholders come forward with their various wish lists for rules to include or not include in the post-transition PSTN regulatory structure. It is now evident that the Commission must use this opportunity to establish a principled framework to guide the transition of the PSTN. This nation’s phone system became the envy of the world due to a steadfast commitment to serving certain fundamental social needs and goals. Moving forward, the Commission must build upon these basic values to ensure that the phone network continues to provide vital communications services to users across the country.

The Commission must move forward with a principled framework to ensure that its decisions and actions are all part of one coherent plan and remain focused on achieving the most fundamental goals for our communications network. A framework can serve as a checklist by which to evaluate every proposal. Many ideas that are focused on one issue will have consequences in other areas, and the Commission must make sure that any trade-offs it accepts between priorities are made deliberately and thoughtfully. A principled framework can also absorb and handle the inevitable unexpected complications that will arise as carriers transition their technology. The recent rural call completion problems that developed as a result of the transition to IP serve as a stark reminder that the issues that stem from this transition will not always be simple or easy to fix, and the Commission’s fundamental principles will guide how it responds to each new problem.

Building from a set of fundamental principles will also prevent the Commission from simply arbitrating between the many wish lists of various parties in this proceeding. Comcast, for example, puts forward no actual principles in its comments, but instead advocates for total deregulation of the phone system. In light of Comcast’s central role in our national
communications infrastructure, this cannot be dismissed as simply a starting bid for negotiations. Comcast’s refusal to join the conversation about the future of our communications systems entirely, on the grounds that it can fend for itself with no interconnection or competition policies and what happens to others is of no concern to Comcast, demonstrates exactly why those policies are so important to the network as a whole.

When the Commission receives comments like Comcast’s, the Commission must remember that it is making policy for the entire phone network, not just for any one carrier, and that policies that impact the entire network must be based on principled, fundamental goals that ensure the nation’s communications needs are met throughout and after the PSTN transition. The technology of the network may change with time, but users’ needs will stay the same and the Commission’s goals should not waver.

ARGUMENT

I. The Commission Must Set the Appropriate Framework by Which to Evaluate Proposals.

As the leading federal authority over the phone network, it is incumbent on the Commission to establish a framework that unifies the Commission’s most fundamental priorities for the phone network and guides the Commission’s evaluation of the many regulatory and deregulatory proposals submitted thus far. At this early stage, the Commission should not engage in simply arbitrating between the wish lists of the many parties that have submitted comments in this proceeding. The Commission must guide this transition based on basic principles, from which the Commission can evaluate the impact of parties’ proposals.¹

¹ Public Knowledge is encouraged by signs that the Commission may adopt just such a framework for the PSTN transition. See Zachary Katz, Policymaking in a Time of Technology Transitions, OFFICIAL FCC BLOG (Feb. 22, 2013), http://www.fcc.gov/blog/policymaking-time-technology-transitions.
The comments filed in this docket already demonstrate an amazingly complex proceeding. Even at this very early stage, unexpected issues have surfaced. For example, Harris Corporation has noted that service providers to the Federal Aviation Administration currently use TDM-based services for air traffic operations, and several consumer groups have explained how the Commission must preserve and foster accessibility for users with disabilities throughout and after the transition.\(^2\) The Commission will also discover all kinds of communities and stakeholders that have relied upon the infrastructure of the existing network and rules in particular ways that have until now flown under the radar, which is again why the Commission must have a framework ready that can absorb and account for those surprises. For instance, many individuals and businesses depend in one way or another on alarm systems currently tied to the existing infrastructure.\(^3\) As the transition continues to unfold, there will surely be more examples to come.

Other proceedings also demonstrate how the transition to IP-based technologies will inevitably lead to unexpected complications for existing issues before the Commission. The Commission will need a principled framework to handle these unanticipated problems. For example, when the transition to IP led to rural call completion problems, the Commission responded by proposing reporting requirements for providers of both TDM- and IP-based voice services to understand and solve the problem.\(^4\) The Commission’s motivation to take this

\(^2\) See Comments of Harris Corporation, Comment Sought on the Technological Transition of the Nation’s Communications Infrastructure, GN Docket No. 12-353 (Jan. 28, 2013); Comments of Telecommunications for the Deaf and Hard of Hearing, Inc. et al., Comment Sought on the Technological Transition of the Nation’s Communications Infrastructure, GN Docket No. 12-353 (Jan. 28, 2013).

\(^3\) See Comments of AARP, Comment Sought on the Technological Transition of the Nation’s Communications Infrastructure, GN Docket No. 12-353 (Jan. 28, 2013).

problem so seriously is based on the fundamental premise that achieving service for all Americans is a top priority. Going forward, the Commission must continue to evaluate issues that arise in this transition according to the same fundamental principles. Which principles the Commission uses to frame its approach will guide how it responds to each particular issue that arises.

Every answer to each unforeseen problem that arises may impact multiple aspects of the basic principles underlying the phone network. For example, geo-location technology in mobile phones aids emergency response to 9-1-1 calls, but also impacts consumer privacy. Using a set of fundamental principles as a guide, the Commission could identify as many of the likely impacts of a new practice or rule as possible, and can thoughtfully and deliberately handle any trade-offs that are necessary.

PK proposes that the Commission adopt the Five Fundamental principles PK has laid out in its Comments as the framework for guiding the PSTN transition, ensuring that the post-transition phone network will still seek to provide service to all Americans, ensure interconnection and competition, protect consumers, guarantee network reliability, and provide key public safety capabilities. First, the Commission must continue to pursue service for all Americans, which also entails carrier of last resort and disabilities access policies. The Commission must ensure that its policies continue to guarantee interconnection and competition in the market, both to preserve call quality across the country and to promote a robust competitive environment for voice services. The transition of the PSTN must also preserve consumer protections that users currently rely upon, including privacy, truth-in-billing, slamming,

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and cramming rules, and effective recourse for the timely resolution of complaints. The PSTN must be able to guarantee that the basic mechanisms of the phone network will work consistently and reliably, on every network. Finally, the Commission must continue to ensure that users can use the phone system to call for emergency services. The Commission is already considering this issue with the Next Generation 9-1-1 transition, but the public safety element of the PSTN transition should also be considered in context with the rest of the elements of the network upgrade.

The transition of the PSTN is an opportunity for the Commission to reexamine and set the framework by which it measures and sets policy for phone service in the United States. The Five Fundamentals serve as a metric by which to evaluate the various proposals already made in this docket according to how well they serve basic principles, rather than simply arbitrating between parties’ regulatory wish lists.

II. Comcast’s Comments Only Underscore the Critical Importance of Competition and Interconnection Rules.

A review of the comments submitted in this proceeding reveals one startling fact: Comcast is the sole submitting party that opposes a regulatory structure for the phone network of any kind. Every other party has at least given nominal support to the idea that the phone network should not be a regulation-free zone. Almost all commenters have acknowledged that the phone system is far too extensive, complicated, and essential to users’ lives to function without at least some backstop mechanisms to ensure that problems and complications do not

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unravel the network as a whole. Even free market advocates such as TechFreedom⁸ and the Free State Foundation,⁹ as well as dominant carriers like AT&T,¹⁰ acknowledge that there must be some sort of regulatory framework to shore up the phone network we all depend upon.

But Comcast, and Comcast alone, suggests that the phone network should function without any regulatory oversight whatsoever. It is unclear whether Comcast takes this position simply because it plans to rely on its sheer size to require all other carriers to deal with it, but it is frightening to think that Comcast—one of the largest residential phone service providers and the largest residential broadband provider in the United States—could so wildly miscalculate the nation’s regulatory needs for a functioning phone system.

For one thing, Comcast’s position refuses to recognize that the entire phone network must operate reliably—including regions that Comcast shows no interest in ever serving. Emergency 9-1-1 services, business communications, and important personal calls are all dependent on a coherently functioning phone network. It is easy to take these vital activities for granted, but it is precisely these uses of the phone network that would be threatened were Comcast to attempt to treat the phone system as it does the video marketplace.

Beyond being crucially important to the fabric of American communications and commerce, the phone system is also an extremely complex intersection of technologies, business

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¹⁰ Comments of AT&T, The Technological Transition of the Nation’s Communications Infrastructure, GN Docket No. 12-353, at 10-11 (Jan. 28, 2013) (“[T]his experiment will give the Commission the empirical insights it needs to make informed judgments about what regulations are necessary for the longer term. And it will enable the Commission to fashion the right regulatory framework from the ground up . . .”).
models, and regulatory structures. These have all developed under the assumption that a stable foundation will keep the network operating reliably. Unlike the internet, which developed in a “best efforts” environment, the phone network has historically depended on bedrock assumptions that the system will deliver a basic level of reliability. Comcast may think that it alone can make it by without guarantees of network reliability, but the Commission should not make policy for the entire phone system based on Comcast’s ambitions to control what portions of the network it can based on pure market leverage.

It is true that the transition of the PSTN will necessitate a review of the current rules, many of which specifically contemplate a TDM-based phone network. But this does not mean that the social needs and goals underlying those rules have changed. Comcast’s dismissal of concerns regarding the impact of the transition on core principles underlying our phone network, like service to all Americans, as “premature” takes exactly the wrong approach to understanding and guiding the PSTN transition. First of all, the Commission must not wait for failures in the market for voice services before it establishes the basic principles undergirding the network. Voice service is simply too important and too critical to emergency communications across the nation for the Commission to wait for disaster to strike before it takes action. And more fundamentally, the Commission must establish foundational principles by which to guide its work before it can even begin sifting through wish lists like Comcast’s request for complete deregulation. At this early stage, the Commission is not expected to have hammered out exactly

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how the regulatory regime for IP-to-IP interconnection will operate,\textsuperscript{13} but the Commission must at this point establish its authority to achieve the overall goal of competition and interconnection in the marketplace, and then evaluate regulatory proposals based on their ability to accomplish that goal.

Despite Comcast’s apparent plan to fend for itself without any regulatory backstops for the phone system, it is far from clear that even Comcast has the power and foresight to keep the phone network running in the case of failures in other parts of the network. So when, as discussed above, the transition to IP-based technologies creates rural call completion problems, the exact causes of which are unclear, Comcast’s argument would dictate that the Commission should stand idly by while customers in rural areas are unable to depend on their phone service to always deliver and receive calls. In contrast, the Commission has in fact issued a Notice of Proposed Rulemaking to more fully understand the causes and prevalence of rural call completion failures.\textsuperscript{14} Moreover, the Commission’s action has shown that it will defend the fundamental principle that it is one of the most basic responsibilities of the Commission to ensure that phone calls go through. It is all the more important that the Commission take a stand on issues like rural call completion, where carriers simply do not have the necessary cost incentive to voluntarily ensure that even rural Americans have a consistently functioning phone service. This leaves it to the Commission to maintain its jurisdiction over issues like rural call completion—whether delivered by TDM-based or IP-based services—or risk that rural customers and other marginalized market segments will simply become collateral damage to the bottom of lines of the most powerful carriers in the country.

\textsuperscript{13} \textit{Contra id.}

Moreover, it is unclear how even Comcast could function smoothly in a completely deregulated post-transition PSTN. For example, how would Comcast or any other managed VoIP provider obtain phone numbers if the Commission’s administration of the North American Numbering Plan is called into question when no more TDM-based providers exist?\textsuperscript{15} Even Comcast cannot replicate the basic administrative functions that the industry relies on the Commission to maintain and operate smoothly. If Comcast got its wish for total deregulation, it is unclear whether even one of the most powerful telecommunications carriers in the country would find itself satisfied with the results.

Looking to the current markets for IP interconnection and cable video service provide cold comfort to those worrying about the consequences of a completely deregulated phone network for subscribers. Peering, program access, or program carriage disputes impose significant inconvenience on consumers who may experience more latency or temporarily lose access to their video services. But when Comcast gets into an interconnection dispute with another carrier over basic phone service, millions of customers will find themselves unable to call 9-1-1, contact loved ones, or conduct business. The stakes are much higher in the world of phone service—and far too high to be subject to gamesmanship between bickering carriers.

The fact that Comcast is willing to throw total deregulation out as its opening position in this proceeding is a sobering reminder that these worst-case scenarios could become very real. Indeed, the fact that Comcast, and Comcast alone, feels comfortable fighting for itself in a regime completely devoid of rules is itself a tremendously convincing argument for why rules are needed. The Commission must fight any inclination to simply adopt Comcast’s or any other

\textsuperscript{15} 47 U.S.C. § 251(e)(1).
stakeholders’ wish lists outright, and must instead focus on a solid, principled framework within which to evaluate each proposal on its own merits.

CONCLUSION

The complexity and diversity of requests in this docket demonstrate that the Commission must establish certain basic principles on which to move forward with the PSTN transition. Without a strong framework to guide the transition, the Commission will only find itself arbitrating between individual wish lists without any guidance as to what goals to achieve. Success is not measured by number of regulations eliminated or preserved. The Commission must resolve to guide and steer the PSTN transition according to fundamental principles that ensure a functioning, competitive, consumer-friendly market for phone service.

Respectfully submitted,

PUBLIC KNOWLEDGE

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