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

In the Matter of )
Technology Transitions Policy ) GN Docket No. 13-5
Task Force )

COMMENTS OF GRANITE TELECOMMUNICATIONS, LLC

Samuel J. Kline, Senior V.P. Corporate Strategy
Michael B. Galvin, General Counsel
Granite Telecommunications, LLC
100 Newport Avenue Ext
Quincy, MA 02171-1759

July 8, 2013

Counsel for Granite Telecommunications, LLC
# TABLE OF CONTENTS

TABLE OF CONTENTS ................................................................................................................ ii

I. Introduction and Summary ..................................................................................................... 1

II. Principles to Guide Potential Trials .................................................................................... 2
   A. Participation in the Trial ................................................................................................... 2
   B. Selection of Trial Areas ................................................................................................. 4
   C. Trials Must Preserve Competition ................................................................................ 5
   D. Trials Must Recognize the Presence of Separate Business and Residential Markets ...... 7
   E. Issues Unique to Certain Types of Trials ....................................................................... 8
      1. Wireline-to-Wireless Trial .......................................................................................... 8
      2. IP Interconnection ...................................................................................................... 10
      3. “All-IP” Trial .............................................................................................................. 10

III. Evaluation Criteria for All Trials ..................................................................................... 13
   A. Consumer Experience .................................................................................................... 13
   B. Service Quality ............................................................................................................... 13
   C. Public Safety .................................................................................................................. 13
   D. Services Provided ......................................................................................................... 13
   E. Intercarrier Agreements .................................................................................................. 13
   F. Success of Trial ............................................................................................................. 13

IV. Conclusion ......................................................................................................................... 14
I. Introduction and Summary

Granite Telecommunications, LLC (“Granite”) respectfully submits these Comments in response to the Commission’s May 10, 2013 Public Notice in this Docket. Granite compliments the Task Force on the thoroughness of its Public Notice, and endorses the idea of a “detailed roadmap” for conducting trials. In previous comments filed in related proceedings, Granite and other competitive carriers have broadly urged the Commission to fulfill recommendations made in the National Broadband Plan to update competition policy for the age of the all-IP network.1 Central to updating this policy, Granite and other competitors urged the Commission to ensure continued wholesale access to reasonably priced last mile facilities capable of providing voice and broadband, regardless of the ILEC’s preferred underlying technology.2

Similar considerations apply at this later stage of the process. In these Comments, there are two fundamental points that Granite seeks to draw to the Commission’s attention. First, the trials should not erode the Commission’s longstanding adherence to the principles that fostering and preserving a competitive market is central to the public interest in providing the public with better and a wider selection of services at the lowest prices. Particularly since the transition may lead to a stage in which ILECs are subjected to less regulation, competition must not be sacrificed during the course of the trials. The Commission should not facilitate transition to a state in which customers are forced to purchase voice and/or data service from an unregulated monopolist or duopolist. Thus, end users must retain the ability to select competitive service and competitive providers must retain the same rights to access reasonably priced wholesale inputs

---


2 Granite Telecommunications, LLC GN Docket No. 12-353 Reply Comments, pp. 11-12 (filed Feb. 25, 2013) (Granite 12-353 Reply Comments”).
that they have under current rules. With the proper structure, the trials outlined in the Notice should provide valuable data to assess key issues associated with the ongoing technology transition.

Second, it is critical that the Commission not lose sight of distinctions between various classes of customers. Business customers and residential customers have different needs and in many instances are served by different types of providers. Even within the business market, the segment of customer locations that are not major enterprise locations – that is, retail or branch locations or small businesses – deserve consideration. For example, as Granite has previously shown, cable providers provide far less competition in the market for business customers than they do in the market for residential customers. The Commission must make sure that the trials are structured in such a way that neither residential customers nor business customers are denied the benefits of robust competition.

II. Principles to Guide Potential Trials

As the Commission considers trials to gauge the consumer impact of certain technology transitions on vital communications services, it should establish some clear principles regarding any such trial. While the goal of the trial is to evaluate the transition to new technology, the Commission must not lose sight of its core mission — to protect the public interest. That means the protection of consumers, and consistent with the Commission’s pro-competitive regulatory framework, preserving and fostering competition.

A. Participation in the Trial

The Commission has correctly identified the need to ensure competition is protected during any trials. The Notice also states that “participation in any trial would be voluntary for

---

3 Granite 12-353 Reply Comments, pp. 6-8.
Granite interprets the term “providers” to include both incumbent and competitive LECs. Many CLECs, including Granite, purchase wholesale services from ILECs in order to provide competitive voice and data services. The Commission must be sure that the trial is structured so that participation in the trial for such CLECs is truly “voluntary,” in the critical sense that the CLEC does not have to choose between participating in the trial and losing the customers it currently serves through use of the ILEC’s wholesale services. There are certainly practical difficulties if a customer served by a CLEC, currently using an ILEC’s last mile facilities pursuant to a contract or tariff arrangement, intends to retain the CLEC’s services, yet the ILEC’s plan for the trial is to “retire” the network facilities currently used by the CLEC to serve the customer. This could arise either in an IP transition trial in which the ILEC wants to retire certain copper facilities currently used by CLECs or in a wireline-to-wireless trial in which the ILEC intends to shift lines from wireline-to-wireless transmission and retire the copper facilities currently in use.

To protect consumers and competition, the Commission should adopt several general guidelines for trials:

- Retail customers should be notified regarding the proposed trial and provided the option of declining to participate in the trial without losing their current retail service.
- Trials should be voluntary for competitors as well; thus, wholesale customers should be notified regarding the proposed trial and provided the ability to decline to participate in the trial without losing their current wholesale service.
- Retail customers should continue to have a choice of service providers.
- Competitors must be given an opportunity to participate in the planning of the trials. For example, in the wireline-to-wireless trials, if the proposed wireless service will not provide end users with all of the functionality they currently enjoy, their current service providers should be aware of it, so that they can offer the end user the choice of participating in the trial or keeping its current

---

4 Notice, p. 3.
functionality, which is the same choice the end user should have if it currently purchases service directly from the ILEC.

- CLECs using wholesale inputs obtained from the ILEC should continue to have wholesale access to underlying facilities or their functional equivalent on rates, terms and conditions similar to current access, regardless of the transmission medium. The ILEC must provide wholesale access to the trial facilities under current rates, terms and conditions.

- No customer should be required to purchase additional CPE in order to participate in the trials. If the ILEC intends to offer a service requiring new CPE, the ILEC should bear that cost itself. The ILEC should define and explain (1) How CPE will be funded and maintained? (2) Whether end users will be able to choose various types of CPE? (3) How the trial CPE experience can be extrapolated to non-trial implementations? (4) What accommodations can be made to allow customers to use their existing CPE and what, if any, advantages may be lost?

- Retail customers should be able to retain the functional equivalent of their present service at its current price, regardless of underlying technology.

- At the conclusion of any trials, all customers (retail and wholesale) should be able to return to their prior services.

B. Selection of Trial Areas

The key principle regarding the selection of the geographic areas where trials occur should be that the geographic area serves as a bellwether for other areas where the technology being tested is likely to be used. Ultimately, the goal of any trial is to create “lessons learned” for the Commission, state regulators and other carriers engaged in or considering similar technology shifts. It makes little sense for the Commission to allow an ILEC to select an area for trial if that market lacks characteristics shared with other areas where the ILEC intends to transition to a new technology. These characteristics could include population density; education profile of residents; unusual climatic conditions; and the mix between residential and business users, among others. Thus, an ILEC nominating particular locations for trials should explain why those locations are predictive for all of the locations in which it intends to transition technology.
The selection of geographic areas in which trials will take place should ultimately rest with the Commission, state regulators and/or tribal authorities. In the end, the decision makers should strive to select a group of test areas that in the aggregate provide it with the opportunity to ascertain how the new technology will work in the diverse set of demographic, topographic and climatic conditions that affect telephony throughout the country. Moreover, the test should be of sufficient duration to provide the Commission with insight as to how the new technology performs even under relatively infrequent conditions, such as hurricanes, tornadoes, floods, blizzards, ice storms, dust storms and other extreme weather. Given that the new technology is proposed to last for many years, to obtain relative certainty as to how it performs in infrequent events, the trial may need to last more than a single year. Finally, while it has been proposed that each test area consist of a wire center, the Commission must consider the benefits and disadvantages of using either larger or smaller test areas.

One possible process would have the Commission establish, pursuant to a notice and comment rulemaking, objective criteria for use in evaluating ILEC proposals. Since ILECs presumably will want to volunteer certain areas, their nominations, pursuant to the criteria, should be subject to public comment. In order to help the Commission evaluate potential trial proposals, the Commission should make a special effort to consult the relevant state commissions and tribal authorities in the process because they and their professional staffs typically have a deep understanding of the characteristics defining any particular trial market and should be able to aid the Commission in evaluating whether a particular market is an appropriate choice.

C. **Trials Must Preserve Competition**

Consistent with the *Notice* and recent statements by Commission officials noting the
importance of continued competition, any trial proposal must address how customers served by competitors will be treated during the course of a trial. The Commission should not assume that all end users affected by a trial will be served by a single entity. Rather, numerous companies rely on the ILEC last mile facilities for providing their services. Granite, like many other CLECs, purchases services including use of an unbundled loop to provide voice and data services to customers.

The most important threshold questions are whether customers served by a non-ILEC that uses ILEC facilities will be required or permitted to participate in the trial and will be permitted to retain their current carrier. At a minimum, no end user should be deprived of its choice of carrier because of the ILEC’s election to participate in a trial using new technology. Any such customer must have the ability to maintain its current competitive choice even if the ILEC wants to replace its wireline services to the customer’s geographic area with wireless services.

In earlier comments regarding the practical issues associated with the AT&T request for a trial, Granite highlighted some of the contractual impediments that may arise during the IP transition. Granite noted that some DS-0 agreements purport to eliminate the ILEC’s obligation to provide service where the loop is transitioned to another technology besides copper. As part of the trial, the Commission should require the ILEC to waive any contractual impediments and provide the CLEC with a functionally equivalent wireless or IP service without any material change to the terms and conditions of its current agreement with the CLEC. This protects competition and consumers by allowing consumers to maintain their choice of suppliers.

---

5 Remarks of FCC Technology Transitions Policy Task Force Acting Director Sean Lev, TIA Network Transition Event, p. 3 (June 21, 2013).
6 Granite 12-353 Comments, pp. 4-5.
7 Id.
D. Trials Must Recognize the Presence of Separate Business and Residential Markets

The Notice also does not clearly acknowledge important distinctions between residential and business services and between retail and wholesale service. Previous comments regarding the IP transition have emphasized that any trial procedures must recognize the important distinctions between retail residential and business services as well as any wholesale counterparts. Further, before any trial is allowed to proceed, the ILEC must describe in significant detail its proposed services, including the full range of features and functionalities available for the service both for residential customers and business customers as well as for wholesale customers serving one or both of these distinct markets.

As the Commission established in the Qwest Phoenix Forbearance Order, the market for serving business customers must be treated separately from the residential market. In the business market, the “ILECs retain their market power advantages in … generally due to lack of alternative customer access facilities for these types of users in most cases.” A technology trial will not alleviate these market power advantages. In fact, without adequate protective measures, the technology trial poses a great risk to competition in the business market where competitors are reliant on the ILEC for transmission facilities.

Business customers also obtain services that are markedly different from residential services and have different features. For example, business customers rely on sophisticated

---


9 See Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area, 25 FCC Rcd. 8622, 8635 ¶ 28 (2010) (“Qwest Phoenix Forbearance Order”) aff’d Qwest Corp. v. FCC, 689 F.3d 1214 (10th Cir. 2012) (explaining that an analysis that fails to separately evaluate market power in business markets separate from the mass market “is not supported by current economic theory.”).

10 XO GN Docket No. 12-353 Comments at p. 6.
features that are not typically part of residential offerings, such as message waiting, hunting, hold, and Centrex features. Business customers also rely on more dedicated customer support functions. It is not clear whether and how an ILEC in a potential trial would dedicate back office resources to the special needs of business customers affected by the trial.

For these reasons, advance notice to customers (including retail and wholesale customers) should identify with precision any differences between pre-existing services and services offered for purpose of the trial. The ILEC must also identify any differences in the terms and conditions for such trial services. For example, would data services provided over wireless be subject to a bandwidth cap? If so, at what level and what is the rate for overages? Are there any limitations on the service? The level of support provided to customers, especially wholesale customers and business customers, would also have to be spelled out well in advance of any trial.

The temporary nature of the trials also demands another important protection. It would be presumptuous for the Commission and participating ILECs to presume success and retire existing facilities or render them obsolete. Instead, customers that elect to participate in the trial should be offered an end date when they will be permitted to switch back to their pre-existing service if they so choose. After all, it is ultimately the customer experience that will determine the success of the trial. The Commission should develop reliable metrics to determine whether customers are satisfied with the services they received during the course of a trial. Allowing customers to reject the replacement service and return to their previous wireline service will provide a measure of the success of the trial.

E. **Issues Unique to Certain Types of Trials**

1. **Wireline-to-Wireless Trial**

The Commission proposes a trial to allow ILECs to substitute wireless technology for existing wireline services. At this stage, some of the proposals are vague. For instance, the
precise contours of the proposed wireless services are not clear and it is not clear whether the proposed wireless service would be used to serve only residential customers or also to serve business customers.\textsuperscript{11} It is also unclear whether a trial would involve wireless substitution for an entire geographic area or just some portion of an area. Verizon, for example, is already proposing to eliminate wireline based service on Fire Island, New York in response to the damage to the island’s wireline network during Hurricane Sandy.\textsuperscript{12} Verizon has filed a tariff detailing its Voice Link replacement service but that leaves many questions unanswered.\textsuperscript{13} It is also unclear whether the trial would involve wireless data service. Verizon’s Fire Island experiment, for example, does not include wireless data service.

The Commission should also collect other data regarding the trial of wireless service, including data regarding network outages, dropped calls, network congestion and network busy messages. The wireless network is generally more susceptible to such issues because of the shared nature of wireless spectrum, limitations on spectrum availability, and propagation characteristics associated with wireless transmission. Measuring how such services function as substitute for the nearly always available, self-powered, wireline network is an important analytical tool for evaluating a wireless trial.

Lastly, if the Commission permits multiple trials of wireless service by different ILECs, the Commission should consider standardizing the wireless offerings in each trial market. If the

\textsuperscript{11} Notice, p. 8.


\textsuperscript{13} See NYSPSC Case No. 13-C-0197, \textit{Tariff filing by Verizon New York Inc. to introduce language under which Verizon could discontinue its current wireline service offerings in a specified area and instead offer a wireless service as its sole service offering in the area.}
offerings are different it may be harder to isolate the cause of different results that may occur from trials in distinct markets. Standard offerings would allow the Commission to more easily identify problems that arise from the trial. Similarly, if the trial is by some measure successful, other carriers seeking to replace some wireline services with wireless will have ready to apply lessons. Those lessons might not be as clear if there are significant differences between the wirelesses products that were offered at different trial sites.

2. IP Interconnection

Granite will not repeat the Comments it previously made regarding IP Interconnection. Rather, it simply directs the Commission’s attention to those Comments, and in addition suggests that agreements for the exchange of IP traffic should be subject to the same requirements under Sections 251 and 252 as are agreements for the exchange of TDM traffic.

3. “All-IP” Trial

The Notice, while asking for specific comment regarding three discrete trials, treats the “All-IP” trial originally proposed by AT&T somewhat differently, perhaps suggesting doubt about whether such a trial should be held. If “All-IP” trials do proceed, while the comments above generally apply to any proposed “All-IP” trial, there is an issue relating to copper retirement that applies particularly to such a trial. While copper retirement is not a predicate for an IP trial, as parties have produced data showing that copper networks can be used to provide IP-based services, the ILEC must be clear on its copper retirement plans. The ILEC should identify if copper would be unavailable throughout a wire center area or for just specific parts of wire center areas.

---

14 Granite 12-353 Comments, pp. 29-33.
15 Notice at p. 10.
16 Issues relating to copper retirement may also arise in the course of the wireline-to-wireless trial.
that area. It should explain how those deployment decisions are made and how they can be extrapolated to all other wire centers. In particular, will the unavailability of copper in the trial wire centers increase over time? Will the unavailability of copper correspond with areas of simulated\(^\text{17}\) copper retirement or will areas where copper is in service but fully in use be included? The Commission should also consider whether any copper retirement is necessary. For purpose of a trial, it is not burdensome, in a confined geographic area, to require the ILEC to retain its copper plant, at least temporarily, if it overbuilds with another technology.

In addition, an ILEC proposing an all IP trial should define how such a trial will be implemented and how consistent that implementation will be with the ILEC’s future network plans. The ILEC should also explain whether some areas of the trial wire center will be served with fiber and others with copper or fixed wireless.

**III. Evaluation Criteria for All Trials**

The Commission should, subject to public notice and comment procedures, adopt in advance a detailed set of benchmarks for use in assessing the success of any trial. While these comments do not aim to propose specific benchmarks, Granite urges the Commission to consider benchmarks aimed at measuring the trial’s success on key subjects.

**A. Consumer Experience**

Regardless of the technology transition subject to the trial, the core issue is whether the transition can be conducted without detracting from the customer’s experience. In some cases parties suggest that the new services will enhance the customer experience.\(^\text{18}\) The Commission must develop benchmarks that can measure whether and how the transition has affected the

\(^{17}\) “Simulated” is used based on the belief that the copper would not be irreversibly retired.

\(^{18}\) Verizon GN Docket No. 12-353 Comments, p. 3 (filed Feb. 25, 2013).
customer experience. For example, measurements of call quality, dropped calls, customer complaints, increased busy signals and network congestion are indicative of the customer experience. Further, to the extent customers have the ability to elect whether to participate in a trial or to opt-out of a trial once underway, the data regarding opt-outs will provide the Commission with insight into the trial’s impact. Finally, consumer satisfaction should also be measured through carefully designed surveys and public meetings.

B. Service Quality

While service quality is certainly integral to assessing the customer experience it is also worth measuring for its own sake. In particular, for the wireline-to-wireless trials, there are issues that customers tolerate with wireless service related to the benefit of mobility — dropped calls, increased interference, signal noise, network congestion, that they may not be willing to tolerate if the service were to replace, rather than supplement, the usually reliable wireline service with which customers are more familiar. Measuring technical performance along these lines should be part of any potential wireline-to-wireless trial. The Commission should also collect data on the availability and penetration of broadband connections, including the types of broadband connections available.

C. Public Safety

Similarly, it is well documented that wireline services are a part of the public safety framework since the copper network supports centrally provided power. This means that customers with power outages can still use landline phones to contact emergency services or loved ones during a power outage. These advantages may be lost when the customer switches to a fiber-based or wireless service. For such services, carriers must provide other arrangements to replace the backup power that is native to the copper-based network. The Commission should develop measures to determine whether these alternative power arrangements are effective and
identify their limits so providers and customers alike understand the impact of the shift away from copper networks.

D. Services Provided

The trials should also consider what services can be provided through the use of the new technology. While new technologies may permit provision of new services, such as video, they may also be unable to provide some currently provided services. For example, today’s copper network, having DC connectivity, is able to support alarm monitoring. The Commission should consider whether the new technology that does not provide DC connectivity will be able to support alarm monitoring and other services requiring DC connectivity. Additionally, business customers rely on their wireline service for payment processing services (such as credit card transaction or point-of-sale processing). The Commission’s evaluation of a trial should consider whether customers need to revise their way of doing business and invest in new payment systems in order to accommodate the ILEC’s choice of underlying network transmission technology.

E. Intercarrier Agreements

Intercarrier agreements that result from a Section 251/252 framework will of course be public and available to all similarly situated carriers. The existence of commercial agreements between an ILEC and a CLEC that are not subject to the Section 251/252 framework should be public knowledge but details should be confidential as long as they commit the parties to a long term agreement across the ILEC’s entire territory.

F. Success of Trial

It is important that the Commission establish in advance of trials what will constitute success. A successful trial would be one which achieves consumer protection and public safety principles over the trial period, preserves or increases competition, increases broadband availability and penetration, and provides a reliable model for implementing future regulatory
and technological transitions throughout the ILEC’s territory. To the extent that trials may result in the relaxation of current regulation of ILECs, the parameters of successful trials should be memorialized in long term commitments by the ILEC.

IV. Conclusion

In establishing the protocols for the trials, the Commission should, as suggested above, take concrete steps to preserve competition and protect consumers by ensuring that both residential and business customers in the trial areas have the right to decide whether to participate in the trial and both residential and business customers that have selected competitive providers are not deprived of their choice of service provider simply because the ILEC has chosen to test a new technology for delivering service.

Respectfully submitted,

/s/
Eric J. Branfman
Joshua M. Bobeck
Bingham McCutchen LLP
2020 K St., NW
Washington, D.C. 20006
202.373.6000 (Tel.)
202.373.6001 (Fax)
eric.branfman@bingham.com
josh.bobeck@bingham.com

July 8, 2013

Counsel for Granite Telecommunications, LLC