

Searching for a New Regulatory Paradigm: A Comment on AT&T's Petition for Wire Center Trials

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Introduction

Laws and regulations governing telecommunications services in the United States are, by nearly every assessment, outdated. To make matters worse, the steady and widespread transition from TDM-based to IP-based technology is putting increasing pressure on the existing regulatory regime. Today, industry and policymakers face the difficult question of how to develop a cohesive regulatory framework for next generation communications services.¹

Last fall, AT&T filed an innovative request with the Federal Communications Commission ("FCC") to jumpstart the search for a new regulatory paradigm.² The petition asks the agency to begin with baby steps by establishing limited wire center "trial runs of the transition to next-generation services, including the retirement of time-division multiplexed ("TDM") facilities and offerings and their replacement with IP-based alternatives."³ According to AT&T, these "trials will help the Commission understand the technological and policy dimensions of the TDM-to-IP transition and, in the process, identify the regulatory reforms needed to promote consumer interests and preserve private incentives to upgrade America's broadband infrastructure."⁴

Opposition to AT&T's proposed deregulated wire center trials has been predictable, even though all the commentators essentially concede

the need to develop a new regulatory framework for modern communications markets. For the reasons outlined in this PERSPECTIVE, we believe that the fears driving such opposition may be misplaced and, for those levying such criticisms, ill-advised.

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First, given the complexity of finding an appropriate regulatory paradigm for a radically-transformed communications marketplace, a real-world and limited test of market-based outcomes with vigorous regulatory oversight will be far more illuminating than the current plan for a piecemeal and prolonged assessment of legacy regulations.

Second, as the economic model below reveals, given regulatory oversight of the trials, participating firms are likely to be on their best behavior during these field experiments. As a result, these trials will provide significant evidence of industry “best” practices (although the practices are expected to be slightly biased against the unconstrained interests of those favoring reform), leaving a trail of precedent applicable to a more widespread implementation of regulatory reform.

Finally, while the experiments will occur with a regulatory blank slate *ex ante*, this approach does not *a fortiori* imply the absence of regulation *ex post*, or the absence of regulation in the future if outcomes differ materially from those observed in the trials. That is, the trials do not lead to an abrogation of FCC jurisdiction. As such, aggrieved parties are not without remedies and, as a result of the trials, are not without documented benchmark behaviors obtained in a setting where participants are on their “best behavior.”

We explain each point in more detail below.

Benefits of a Real World Test

Though perhaps a slight exaggeration, AT&T proposes that the search for a new regulatory paradigm is best served by starting with a regulatory blank slate, thereby creating an environment where market solutions are allowed to emerge without the distortions of regulatory influences. Specifically, AT&T proposes that the Commission “keep IP services free of legacy regulation so that the trial may proceed without the distorting and investment-chilling effects of such regulation.”⁵ It appears that this *ex ante* blank slate is source of much concern.

Over the years, legacy regulation has created many constituencies, and the loss of some regulatory favors and protections threatens the status quo, including particular business plans dependent on certain regulatory mandates. In

an effort to discredit AT&T’s proposal, various companies and organizations have argued that AT&T is proposing the end of all regulation, but this take on the proposal is more advocacy than reality. The company does not, as some claim, propose the end of all regulation. As the company’s petition directly states, “at a minimum, the experiment will enable the Commission to consider, from the ground up and on a competitively neutral basis, what, if any, legacy regulation remains appropriate after the IP transition.”⁶ This statement makes clear that a regulatory blank slate is the starting point; it is not necessarily the end point.

[T]he “blank slate” option allows the Commission to target its activities at genuine, observable shortfalls in unregulated marketplace dealings. In light of its narrow application to a few select trial areas, the costs of errors are minimized, but the benefits of experimentation are maximized—particularly in terms of revealing what regulations are not necessary for next-generation services offered in a competitive market.

A case for AT&T’s proposal can be made by comparing the available alternatives. Picking and choosing which regulations remain essential for next-generation communications services may proceed in (at least) two ways. First, legacy regulations can be removed or reformed as they are found to be unnecessary or inadequate. This piecemeal approach suffers from numerous shortcomings. Regulation is like a house of cards, where the removal of one rule impacts the adherence to and enforcement of other rules. Getting rid of one rule may lead to disaster, whereas getting rid of the same rule in addition

to another may render a desirable outcome. It is not always obvious how regulations interact. Further, the observed behaviors and practices of firms, whether generally or in trials, are influenced by the regulatory constraints placed on the behaviors and practices of firms. Thus, behaviors and practices in a heavily-regulated world may not reflect the behaviors and practices in a less regulated world. Additionally, regulations that do not apply in the context of the trial, and thus draw no attention, may later place undesirable and unnecessary constraints on behaviors.

The second approach, as offered by AT&T, is to start with a blank slate, and in so doing permit marketplace dealings to reveal those areas where marketplace transactions break down. While we admit that this approach will be unnerving for some, the “blank slate” option allows the Commission to target its activities at genuine, observable shortfalls in unregulated marketplace dealings. In light of its narrow application to a few select trial areas, the costs of errors are minimized, but the benefits of experimentation are maximized—particularly in terms of revealing what regulations are not necessary for next-generation services offered in a competitive market.

Either approach is feasible, and both have been proposed. However, there is little need to run trials to see how legacy regulations influence decisions, since the market is already burdened with legacy regulations. What we cannot observe today is outcomes from less regulated settings. Since many believe substantial reforms are necessary, it perhaps makes more sense to take the more radical but far more informative approach, at least in very limited trials with regulatory oversight.

Economic Model

A core argument of many critics of AT&T’s plan is that the proposal is self-serving because it is (initially) deregulatory in nature. Indeed, even the important issue of carrier interconnection

appears to be left open. Yet, the truth is that this approach to the problem comes at a significant cost to AT&T in that the trials create precedent for acceptable behavior. A simple economic model illustrates the logic.

Say a firm offers a single product at price P . Let the profit function for a firm under an existing regulatory regime (labeled with the subscript E for “existing”) be,

$$\pi_E(P) = ZP - P^2. \quad (1)$$

Now, let there be an “alternate” regulatory regime (labeled A) that is more favorable in that the firm expects to earn higher profits in that regime. The profit function under the alternate regulatory regime is,

$$\pi_A(P) = (Z + \theta)P - P^2 \quad (2)$$

where $\theta > 0$. This specification of the problem implies that the alternate regime generates higher profits at every price level and also increases the marginal incentive to raise prices. (Alternately, we could model a cost reduction where price would be lower, but in the linear model, the use of θ has the same implication for welfare.)

For a simple regime change, the profit maximizing prices are,

$$P_A^* = \frac{A + \theta}{2} > \frac{A}{2} = P_E^*. \quad (3)$$

Now, suppose that the regime change is not certain, but depends on the regulator’s assessment of price across the two regimes.

Regulators do not prefer high prices, so that the probability that the firm is exposed to the alternate regime A is given by the decreasing function $\lambda(P)$. That is, the higher the price in the alternate regime, the less likely the regulator switches to the alternate regime. Hence, the lower the price the firm sets, the more likely it is

that the regulator will switch to the favorable regulatory regime.

With regulatory “uncertainty,” the expected profit function is given as,

$$\pi_{\lambda}(P) = AP + \theta P\lambda(P) - P^2, \quad (4)$$

and the optimal price would be,

$$P_{\lambda}^* = P_E^* + \theta[\lambda(P_{\lambda}^*) + P_{\lambda}^*\lambda'(P_{\lambda}^*)]. \quad (5)$$

Since $\lambda(P)$ is a decreasing function, its derivative (λ') is negative, and hence the term in the brackets might be positive, negative, or even zero. Accordingly, the optimal price under uncertainty about the regime change could be above, below, or equal to the price found under the less-profitable, existing regulatory scheme. This ambiguity about price merely reflects the fact that the regulated firm may prefer the existing regime over the alternate regime at some prices. (Note that even at a higher price in the alternate regime, social welfare is larger because demand is higher.)

More specificity about the price can be obtained by adding a little more structure to the problem, with particular attention to the behavior of the regulator. As a simple example, consider the following function for $\lambda(P)$:

$$\lambda(P) = \frac{1}{P}, \quad \text{for } P \geq 1, \quad (6)$$

so as P rises, λ falls. In this particular case, we would then have that:

$$P_{\lambda}^* = P_E^*. \quad (7)$$

In other words, uncertainty about the regime change results in the firm choosing the exact same price as under existing regulation. The firm does not raise price, despite the fact a higher price generates higher profits, because the higher price reduces the probability of existing regime change.

Now, suppose the regulator is “tougher” in the sense that the probability of a regime change drops even faster with respect to price increases:

$$\lambda(P) = \frac{\alpha}{P^2}, \quad \text{for } P \geq \sqrt{\alpha}. \quad (8)$$

In this case, the optimal price would be:

$$P_{\lambda}^* = P_E^* - \frac{\theta}{2} \left[\frac{\alpha}{(P_{\lambda}^*)^2} \right] < P_0^*. \quad (9)$$

Hence, when the regulator is more sensitive to the price, the firm sets an even lower price in order to avoid the strong threat of sticking with the existing and less-profitable regulatory regime.

The point of this exercise is not to make strong claims about how prices will differ between legacy regulation (E) and a new regulatory regime (A). In reality, we suspect that there will be many differences in business arrangements in any new and rational regulatory paradigm. Rather, the point is to illustrate that the observed behaviors (whether in terms of price or other choices) in the AT&T-proposed trials are dependent on the “toughness” of regulatory oversight. Since the regime change sought by AT&T depends on the consent of the watchful regulator, the trials will establish a precedent of favorable terms and conditions for consumers, rivals, and related firms.

Albeit informally, many of the plan’s critics have recognized the basic economic logic of this model. Some of AT&T’s rivals argue that AT&T would be on its “best behavior” during the trial, and thus the evidence obtained during the trial is meaningless.⁷ However, the “best behavior” argument is not a valid criticism of AT&T’s proposal, but a reason to go on with it. If AT&T must behave in a way that the regulator believes is appropriate in order to extend the regime change more broadly, then the company may very well establish precedent for reasonable behavior. Indeed, many of the comments against the plan claim that AT&T refuses to

provide IP interconnection on reasonable terms (if at all). Plainly, the failure to provide IP interconnection on reasonable terms in the trial market will result in a very low probability of a regime switch.

[T]he “best behavior” argument against the AT&T proposal is not so much a criticism of AT&T plan as it is a statement about the general lack of faith in the regulator. Yet, if the regulator cannot be trusted, then it is difficult to justify an adherence to the existing regulatory regime that has evolved over time under the direction of an incompetent regulatory authority.

Enforcement in a Post-IP Transition World

In the previous section, we presented a formal argument showing that regulatory oversight of the regime shift will lead AT&T, and other participants in the trials, to be on their best behavior. As a result, fears that the wire-center trials will unleash a torrent of immediate anticompetitive behavior are misplaced.

But what of the larger argument that firms will only behave nicely during the trials to get the FCC to grant AT&T’s petition in toto, but once granted firms will then show their true stripes and the FCC will be powerless to stop them? Again, these fears are misplaced.

Why? Because it is black letter administrative law that the FCC can change its mind and re-regulate, provided it articulates a rational reason for doing so.⁸ Indeed, here are just two recent examples where the current Commission has

sought to re-impose regulation (although we could easily point to others):

Forbearance Under Section 10:

After numerous complaints about the way it handled requests for forbearance under Section 10 of the Communications Act, the FCC decided to revise its analytical framework and adopt a new—but virtually impossible standard to satisfy⁹—“market power” analysis moving forward.¹⁰ Even though a reviewing court found that the FCC “engaged in some goalpost-moving on this issue”, the court nonetheless upheld the agency’s actions because it “offered an extensive discussion of its reasons” for its change in policy.¹¹

Suspension of Special Access Deregulation:

Last August, the FCC took the bold step to suspend (supposedly on an “interim basis”) its rules allowing for grants of pricing flexibility for special access services.¹² According to the agency, it was taking this draconian action “in light of significant evidence that these rules, adopted in 1999, are not working as predicted, and widespread agreement across industry sectors that these rules fail to accurately reflect competition in today’s special access markets.”¹³ And, in December 2012, the FCC followed up on its suspension order by issuing an extensive data request and revised analytical framework.¹⁴ While this PERSPECTIVE is not the place to debate the economic consequences of special access regulation,¹⁵ the FCC’s actions in this docket show a clear willingness and ability of the FCC to re-engage and re-regulate should it so choose.

In sum, the “best behavior” argument against the AT&T proposal is not so much a criticism of AT&T plan as it is a statement about the general lack of faith in the regulator. Yet, if the regulator cannot be trusted, then it is difficult to justify an adherence to the existing regulatory regime that has evolved over time under the direction of an incompetent regulatory authority.

Conclusion

Most agree that telecommunications regulation in the U.S. needs meaningful reform. Reform implies change, however, and change implies conflict. Legacy regulation has many constituents, and while they may see that reform is inevitable, they will prefer the slow road. Given the dramatic changes that have occurred in telecommunications markets in the last decade or so, there is a strong argument for dramatic regulatory reform in the near term.

On the issue of an IP Transition, Zac Katz, the Chief of Staff at the FCC, recently wrote on the FCC's Official Blog that the agency must take a "nuanced, data-driven approach to determining which policies to keep, which to eliminate, and which to add or modify."¹⁶ Where will these data come from? Based on the agency's historic frustrations with compelling industry-wide data requests, it would seem that a supervised, real-world market trial might be an effective use of the agency's limited resources.

Indeed, AT&T has proposed an interesting experiment that could reveal much about the requirements for regulatory intervention in the modern telecommunications market. Loosely, the company proposes to remove most legacy regulations in select geographies and then to observe the effectiveness of the marketplace to provide next-generation services in an efficient manner. Regulators will oversee these trials, and stand ready to intervene if necessary. Over time, the process should reveal what regulatory interventions, if any, are necessary *today*, rather than those regulations deemed necessary in 1934 when the nation's communications law was written. It's an interesting approach and one worthy of serious consideration.

NOTES:

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¹ NATIONAL BROADBAND PLAN: CONNECTING AMERICA, Federal Communications Commission (March 2010) (available at: <http://www.broadband.gov/download-plan>) at 59 (hereinafter "*National Broadband Plan*"); FCC Chairman Julius Genachowski Announces Formation of "Technology Transitions Policy Task Force" (December 10, 2012) (available at: http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db1210/DOC-317837A1.pdf).

² *AT&T Petition to Launch a Proceeding Concerning the TDM-To-IP Transition*, FCC Docket No. GN 12-353 (November 7, 2012) (available at: <http://apps.fcc.gov/ecfs/document/view?id=7022086087>).

³ *Id.* at p. 1.

⁴ *Id.*

⁵ *Id.* at p. 22.

⁶ *Id.*

⁷ *See, e.g.*, Comments of Granite Communications, LLC in Docket No. GN 12-353 (Jan. 28, 2013) at pp. 51-55 (available at <http://apps.fcc.gov/ecfs/document/view?id=70221136840>); Comments of XO Communications in Docket No. GN 12-353 (Jan. 28, 2013) at pp. 30-33 (available at: <http://apps.fcc.gov/ecfs/document/view?id=7022113762>).

⁸ *See, e.g., F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502 (2009).

⁹ G.S. Ford and L.J. Spiwak, *The Impossible Dream: Forbearance After the Phoenix Order*, PHOENIX CENTER POLICY PERSPECTIVE NO. 10-08 (December 16, 2010) (available at: <http://www.phoenix-center.org/perspectives/Perspective10-08Final.pdf>).

¹⁰ *In the Matter of Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, FCC 10-113, MEMORANDUM OPINION AND ORDER, 25 FCC Rcd. 8622 (rel. June 22, 2010) (hereinafter the *Phoenix Order*).

¹¹ *Qwest v. FCC*, 689 F.3rd 1214, 1227 (10th Cir. 2012).

¹² *In the Matter of Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, FCC 12-92, REPORT AND ORDER, 27 FCC Rcd. 10557 (rel. Aug. 22, 2012).

¹³ *Id.* at ¶ 1.

¹⁴ *In the Matter of Special Access for Price Cap Local Exchange Carriers; AT&T Corporation Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, FCC 12-153, REPORT AND ORDER AND FURTHER NOTICE OF PROPOSED RULEMAKING, __ FCC Rcd __ (rel. December 18, 2012).

¹⁵ *See, e.g.*, T.R. Beard, G.S. Ford and L.J. Spiwak, *Market Definition and the Economic Effects of Special Access Price Regulation*, PHOENIX CENTER POLICY PAPER NO. 37 (October 2009) (available at: <http://www.phoenix-center.org/pcpp/PCPP37Final.pdf>).

¹⁶ Z. Katz, *Policymaking in a Time of Technology Transition*, Official FCC Blog (February 22, 2013) (available at: <http://www.fcc.gov/blog/policymaking-time-technology-transitions>).