

No Dialtone: Second Thoughts on the PSTN's Demise

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TABLE OF CONTENTS

I.	INTRODUCTION.....	526
II.	THE PSTN TRANSITION HAS ALREADY STARTED.....	526
III.	PRESERVING THE PSTN'S FEATURES WITHOUT REGULATION	528
IV.	CONCLUSION	536

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I. INTRODUCTION

With only mild hyperbole, Werbach states that “[t]he transition from the PSTN to a broadband network of networks is the most important communications policy event in at least half a century.”¹ For years, Internet aficionados have proclaimed the imminent death of the Public Switched Telephone Network (“PSTN”), asserting that telephony is just another app. Finally, that day has arrived. People are leaving the PSTN in droves. As Werbach notes, the fraction of U.S. households with a wireline telephone has fallen from 93% in 2003 to 25% in 2013.²

In fact, telephone companies are not standing idly by while their PSTN base erodes. The fixed cost of the PSTN is huge, as Werbach points out;³ as the revenue base erodes, maintaining the PSTN becomes untenable. Telephone companies are actively seeking to sunset the PSTN in two ways: first, by petitioning the FCC to permit them to conduct local trials to transition customers from PSTN to wireless or VoIP; and, second, by announcing plans to transition most customers by 2015.⁴

II. THE PSTN TRANSITION HAS ALREADY STARTED

Werbach is clear that this transition is a good thing. He states:

The time has come to address the situation squarely. The lesson from prior structural transitions in communications such as digital television, the AT&T divestiture, and the opening of local telephone competition is that, with good planning and the right policy decisions, such shifts can proceed smoothly and open new vistas for competition and innovation.⁵

This is the first indication that Werbach is far off-base. If these are examples of good planning and the right policy decisions, we are all in big trouble.

First, the transition to digital television broadcasting was mandated by the Telecommunications Act of 1996, to be achieved by 2006.⁶ Nevertheless, the transition was pushed back several times, and finally

1. Kevin Werbach, *No Dialtone: The End of the Public Switched Telephone Network*, 66 FED COMM. L.J. 203, 205 (2014), available at http://www.fclj.org/wp-content/uploads/2014/06/66.2.1_Werbach-Final.pdf.

2. See *id.* at 211 n.27. This number refers only to traditional PSTN wireline telephones. VoIP telephony provided over cable is technically wireline as well, but not PSTN.

3. *Id.* at 225 (citing BRETT M. FRISCHMANN, *INFRASTRUCTURE: THE SOCIAL VALUE OF SHARED RESOURCES* 12–14 (2012)).

4. Werbach, *supra* note 1, at 213–15.

5. *Id.* at 205.

6. See *id.* at 259–60.

implemented in June 2009. While the actual transition went relatively smoothly, thirteen years seems a rather long time for a transition substantially less stressful than the demise of the PSTN.

Second, although the AT&T divestiture broke up the country's largest monopoly three decades ago, after many years of industry evolution and a great deal of cost, we now have two dominant suppliers of telephony that use the PSTN.⁷ It is hard to see how this is a major advance, at least as regards telephony.

Third, the introduction of local telephone competition via the Telecommunications Act of 1996 involved over five years of FCC rulings to make competitive local exchange carriers ("CLECs") viable. In this case, competition involved the mandated wholesale of incumbents' local PSTN distribution facilities to new entrants.⁸ Today, virtually all PSTN competition is either wireless or VoIP; CLECs have all but disappeared.⁹ Again, it's difficult to understand why this was at all useful.

"[G]ood planning and the right policy decisions?" Let's hope we can avoid similar disasters to the ones these exemplars have visited upon us for the PSTN transition.

While Werbach supports the PSTN transition, he is critical of some of what the telephone companies have done so far. He notes that Verizon has offered Voice Link service, a wireless platform, as a substitute for wireline where problems have occurred.¹⁰ He goes on to state that Voice Link is by no means a perfect substitute for PSTN local service.¹¹ But most of the features he claims Voice Link lacks are either available or insignificant. For example, he claims that one cannot use Voice Link to transmit a fax, as one can do using a wireline phone.¹² But there are numerous wireless fax apps available on smartphone app stores.¹³ He also notes that a cell phone cannot be used as a dial-up modem;¹⁴ this is true, but why would anyone want this service? With a smartphone tethered to a computer, a user can access the Internet directly (and at higher speeds than a dial-up modem).¹⁵ Again, he mentions that a wireless phone (and perhaps VoIP) can't be used with current burglar alarms;¹⁶ however, much better

7. *Id.* at 225 n.121.

8. See Thomas W. Hazlett, *Rivalrous Telecommunications Networks with and Without Mandatory Sharing*, 58 FED. COMM. L.J. 477, 491 (2006).

9. *Id.* at 497–500.

10. Werbach, *supra* note 1, at 216.

11. *Id.*

12. *Id.*

13. See, e.g., FaxFile, eFax, PC-FAX, Mobile Fax Free, and iFax, GOOGLE PLAY, available at <https://play.google.com/store/search?q=fax> (containing such descriptions as "Mobile Fax turns your phone into a fax machine!").

14. Werbach, *supra* note 1, at 216.

15. See, e.g., FoxFi, GOOGLE PLAY, available at <https://play.google.com/store/apps/details?id=com.foxfi>; see also FCC, *Verizon Wireless to Pay \$1.25 Million to Settle Investigation*, Press Release (July 31, 2012), available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-315501A1.pdf.

16. See Werbach, *supra* note 1, at 216.

home security systems are currently available that use the Internet, and they are often cheaper than old-fashioned burglar alarms.¹⁷ Werbach's claims thus seem somewhat pedestrian, akin to complaining that modern interstate highways are not very suitable for horses and buggies.

Perhaps more on point is that Voice Link guarantees a 36 hour battery; is this enough? Are extra batteries available for those who need them? How about batteries to run cellular towers in case of a general power outage? We know that in major disasters, such as Hurricane Katrina, all communications may go down: PSTN, wireless, and cable (during Hurricane Katrina, only satellite continued to function).¹⁸ What is an acceptable battery life, and who should decide what's acceptable? Werbach does not say.

Werbach characterizes AT&T's petition for limited trials to replace the PSTN with services subject to fewer regulations as "a dagger to the heart of the telecommunications regulatory structure of the Communications Act,"¹⁹ as it appears to presage the nationwide deployment of PSTN's replacement and, with it, the demise of many longstanding regulations. But isn't this a good thing? We regulated the PSTN because it is (or was) a natural monopoly; if we now use competing Internet and wireless services as alternatives, then the monopoly is no more. So why do we need to keep regulation? Werbach believes the transition from the PSTN natural monopoly is a good thing, but he seems to think residual regulation is a good thing too—even if the rationale for it has disappeared.

III. PRESERVING THE PSTN'S FEATURES WITHOUT REGULATION

Early on, Werbach lays out how the PSTN should be defined in six concepts:

- (1) Technical architecture;
- (2) Regulatory arrangement;
- (3) Market structure;
- (4) Universal connectivity;
- (5) Strategic infrastructure; and
- (6) Social contract.²⁰

17. See, e.g., Devin Coldewey, *Scout Brings Home Security to the Internet Age (and It's Cheap)*, NBCNews.com (Feb. 14, 2013), available at <http://www.nbcnews.com/tech/gadgets/scout-brings-home-security-internet-age-its-cheap-f1C8381570>.

18. See Dr. Robert Miller, *Hurricane Katrina: Communications & Infrastructure Impacts*, in THREATS AT OUR THRESHOLD: HOMELAND DEFENSE AND HOMELAND SECURITY 191, 194-195 (Burt B. Tussing ed., 2006).

19. Werbach, *supra* note 1, at 214.

20. *Id.* at 220.

He sums up his article in this superb statement: “In essence, the first three conceptions of the PSTN are essentially descriptive, while the other three are normative. What the PSTN *is*, should be allowed and even encouraged to change; what the PSTN *does*, should be protected.”²¹ In other words, the first three conceptions will disappear with the transition, but the second three must be maintained. I fully agree with this statement, and applaud Werbach’s insight and concision. However, I would not use the word “protected,” as it implies that there must be a “protector,” i.e., a regulator. I would rather use the term “assured”; if we are relatively confident that, for example, the market would assure these conceptions survive the transition, with no need for a regulator, then all should be happy with a market solution. Only in the event of a market failure would it be necessary to roll out the regulator.

Yet Werbach seems to believe that the transition from PSTN to IP-based technology would surely result in an oligopoly—a proposition without empirical support—and that an oligopoly requires regulation to control market power. Our economy, however, seems rife with oligopolies in many industries: automobile manufacturing and Internet search engines, to name two, and yet we seem to do well without regulating these oligopolies. Why the need to regulate IP-based telephone providers? The U.S. has two federal agencies responsible for prosecuting anti-competitive behavior: the Federal Trade Commission and the Department of Justice. Surely they are up to the job of policing market power problems.

Werbach then gets to the core of his argument, the three normative conceptions. I address each in turn.

Universal connectivity. The idea is that everyone should be connected to everyone else. There are two parts to this idea. The first is that everyone should have access to the network. Clearly, everyone has access to the PSTN; after the PSTN goes, will everyone have access to the Internet, or to wireless telephony? The data suggests that Internet/wireless access today is universal:²² over 96% of US households have access to at least one 768 kbps (or greater) broadband provider,²³ plenty enough for VoIP, and 98% have access to at least one wireless provider,²⁴ all of which was accomplished without any regulatory requirement for universal access. Werbach’s point of universal connectivity is important, but it appears that the Internet and wireless markets together have already accomplished this. What is the need for regulation?

The second part is that all the networks that comprise the Internet should interconnect with each other, a principle known as interconnection. This issue arises in the PSTN, wherein interconnection became a total mess

21. *Id.* at 221.

22. See NTIA, BROADBAND STATISTICS REPORT (2013), available at http://www2.ntia.doc.gov/files/broadband-data/Technology_by_Speed_June2013.pdf.

23. *Id.*

24. *Id.*

during the 1990s and early 2000s, due in large measure to regulation.²⁵ In contrast, networks in the unregulated Internet have managed to achieve interconnection using private contracts, without any difficulty whatsoever, since the mid-1980s. Werbach describes these various relationships: peering, transit, paid peering, each of which has a traditional commercial arrangement regarding who pays whom. It was only after the FCC adopted its Open Network Order in 2010,²⁶ thus signaling the FCC's willingness to extend regulation to the Internet, that a string of complaints arose from backbone networks, such as Level 3 and Cogent, against ISPs, such as Comcast and Verizon, demanding that the FCC order ISPs to provide the backbone networks free interconnection—contrary to established industry customary agreements.²⁷ Thus, over two decades with almost no complaints regarding Internet interconnection broke down when the FCC indicated its willingness to regulate.

Is interconnection important? It is vitally so, as Werbach correctly emphasizes. But is regulation needed to assure interconnection? The evidence suggests the opposite is true; without regulation, the Internet firms interconnected without problems, and certainly without customer outages.²⁸ With regulation, the PSTN had no end of difficulty maintaining fair and reasonable interconnection.

Strategic infrastructure. Werbach notes that the “[s]trategic aspects of the PSTN include reliability, security, law enforcement access, and public safety.”²⁹ But is the Internet any less strategic than the PSTN? Surely we are concerned with the reliability of the Internet, and much attention has been given to its security in recent months, but these issues are addressed by other agencies without the FCC's help. Further, existing regulations assure that law enforcement has access to VoIP and wireless telephony for legal wiretaps,³⁰ and also assure that VoIP and wireless telephony provide access to E911 service,³¹ so these problems are already solved. Why is more regulation necessary? Certainly the smooth functioning of the PSTN is important to the government, but the smooth

25. Gerald Faulhaber, *Should the FCC Regulate Internet Interconnection?* PENN PROGRAM ON REG. REG BLOG (June 9, 2014), available at <http://www.regblog.org/2014/06/09-faulhaber-should-the-fcc-regulate-internet-interconnection.html>.

26. Preserving the Open Internet, *Report and Order*, FCC 10-201, 25 FCC Rcd. 17905 (2010) [hereinafter *Open Internet Order*], *aff'd in part, vacated in part sub nom.* Verizon v. FCC, 740 F.3d 623, 636–42 (D.C. Cir. 2014).

27. See Faulhaber, *supra* note 25, for a detailed history of these recent complaints.

28. For a complete analysis of Internet interconnection disputes, their resolution, and their impact on customers, see Hal J. Singer, *Mandatory Interconnection: Should the FCC Serve as Internet Traffic Cop?*, Policy Brief, PROGRESSIVE POL'Y INST. (May 27, 2014), available at http://www.progressivepolicy.org/wp-content/uploads/2014/05/2014.05-Singer_Mandatory-Interconnection_Should-the-FCC-Serve-as-Internet-Traffic-Cop.pdf.

29. Werbach, *supra* note 1, at 226.

30. See Communications Assistance for Law Enforcement Act, Pub. L. No. 103-414, 108 Stat. 4279 (1994) (codified as amended at 18 U.S.C. § 2522 and 47 U.S.C. §§ 229, 1001-1010).

31. See 47 C.F.R. § 9 (2014).

functioning of the Internet is at least as important, and yet we have done quite well without the FCC regulating the Internet. What is the rationale to change course now?

Social contract. The initial social contract entailed granting private companies monopolies over telephony in return for their providing affordable service to all. As Werbach notes:

Even after the opening of all telecommunications markets to competition, incumbent service providers supporting the PSTN still receive a variety of benefits. These include low-cost access to pole attachments and rights-of-way, receipt of universal service subsidies when serving high cost areas, free spectrum for the initial offering of mobile phone service, and protection against antitrust liability on the grounds that the Communications Act comprehensively regulates the field.³²

Maybe it's time we stop giving incumbents some of these benefits. Since Internet and mobile wireless access is now universal, why is it necessary to provide universal service subsidies anymore? Perhaps doing so was necessary in the last century, but it is certainly not needed today. And the FCC hasn't handed out licensed spectrum for free in two decades. It is indeed true that regulation shields PSTN providers from antitrust liability,³³ but why does this remain necessary? Let's remove the shield by removing regulation and let antitrust authorities police abuses of market power if and when they occur.

Werbach insightfully notes that much of what the FCC regulates is migrating to the regulation-free Internet and the much less intensively regulated wireless industry. “[U]nless the FCC intends to go out of business,” Werbach opines, “it must take action.”³⁴ The obvious riposte is: what's the matter with the FCC going out of business? If a regulator is no longer needed, going out of business is exactly what should happen to it. Werbach appears to believe that the FCC should be looking for something, anything, to regulate or else its employees will be out of a job—an outcome he opposes. To the contrary, getting rid of unnecessary bureaucrats and regulations is beneficial to the public interest.

Werbach's fundamental point is that the three “enduring objectives” require that regulations be extended to the Internet in order to ensure their continued existence.³⁵ Again, while I agree that these enduring objectives are important, I disagree with Werbach that imposing regulation on the Internet to “protect” these enduring objectives is needed. In fact, at present, wireless and voice over the Internet actually meet these objectives with

32. Werbach, *supra* note 1, at 228.

33. *See, e.g.*, 15 U.S.C. § 45(a)(2) (2012) (exempting most “common carriers” from the FTC's authority to prohibit unfair practices).

34. Werbach, *supra* note 1, at 229.

35. *Id.* at 226.

little or no regulation. The competitive market has managed to get the job done with *de minimis* help from regulators.

And this is exactly the way the FCC intended the Internet to work. In his earlier work, Werbach himself said as much, noting that “as a practical and policy matter, regulation of Internet telephony would be problematic. It would be virtually impossible, for example, for the FCC to . . . require the ISPs segregate voice and data packets passing through their networks for regulatory purpose.”³⁶ In *No Dialtone*, however, Werbach changes his tune, claiming that the PSTN has been undermined by the “collapse of the regulatory theory for data services.”³⁷ While I agree that this transition is a good thing (for all the reasons Werbach mentions), his assertion about the regulatory theory for data services is a complete puzzle. For years, the FCC has had a strong and consistent position regarding the “regulatory theory” of the Internet (and before that data services), as Jason Oxman has explained:

Although the FCC has a long tradition of encouraging the growth and development of the Internet by nonregulation, deregulation, and certain affirmative market-opening policies, there are frequent calls from many sources for the FCC to become more heavily involved in Internet regulation The challenge to the FCC . . . is to . . . further the Commission’s longstanding goal of promoting competition, not regulation, in the marketplace.³⁸

Further, former FCC Chairman and Clinton appointee William Kennard made the FCC’s “regulatory theory” for the Internet even clearer:

[T]he best decision government ever made with respect to the Internet was the decision that the FCC made . . . NOT to impose regulation on it. This was not a dodge; it was a decision NOT to act. It was intentional restraint born of humility. Humility that we can’t predict where this market is going.³⁹

This seems to be a very clear statement of the FCC’s “regulatory theory for data services,” and is perfectly consistent with the transition

36. Kevin Werbach, *Digital Tornado: The Internet and Telecommunications Policy* 29 (FCC OPP, Working Paper No. 29, 1997), available at http://transition.fcc.gov/Bureaus/OPP/working_papers/oppwp29.pdf.

37. Werbach, *supra* note 1, at 205.

38. Jason Oxman, *The FCC and the Unregulation of the Internet* 22 (FCC OPP, Working Paper No. 31, 1999), available at http://www.fcc.gov/Bureaus/OPP/working_papers/oppwp31.pdf.

39. William E. Kennard, Chairman, FCC, *The Road Not Taken: Building a Broadband Future for America*, Remarks at the National Cable Television Association (June 15, 1999), available at <http://www.fcc.gov/Speeches/Kennard/spwek921.html>.

away from the PSTN. For several decades, the FCC's has clearly embraced a "hands off" policy towards the internet, and during that time, the Internet has been one of the great success stories of the past century.⁴⁰ Now, Werbach seems to believe it is time to regulate the Internet. I disagree strongly. The market-based Internet is doing just fine, fulfilling all of Werbach's enduring objectives. It works; let it be.

But how much could a little bit of regulation hurt? Werbach's recommendations sound pretty reasonable. Aren't I being a bit alarmist about the effects of regulation?

Economists have examined the costs of regulation in general for several decades. We need not repeat their arguments here, as they are well-known. The definitive works are Noll⁴¹ and Carlton and Perloff.⁴² In practice, regulation often results in firms and customers constrained by inefficient market actions, lessened incentives to invest, and the complete elimination of incentives for entry and innovation.⁴³ Regulation also opens wide opportunities for rent-seeking, as firms seek market advantage by administrative fiat rather than by serving their customers well.⁴⁴ When regulators are open for business, firms are quick to understand that pleasing or manipulating their regulators is far more important than innovating, investing, and pleasing customers. It is precisely because regulators have not been open for business on the Internet that it has been such an innovative and successful enterprise.

Advocates of regulation often ignore its seamy side, hoping that proposed network neutrality regulation will work perfectly or nearly so, without serious unintended consequences and implemented by an FCC that is all-wise, lobby-proof, and above-politics. Those of us with actual experience with regulators, myself included, find this Pollyanna attitude naïve in the extreme. Indeed, even regulators themselves are acutely aware of the serious limitations of regulation. Recently, the Federal Trade Commission warned of these costs when the FCC was considering network neutrality regulation:

[W]e suggest that policy makers proceed with caution in evaluating calls for network . . . regulation. . . . No regulation, however well-intended, is cost-free, and it may be particularly difficult to avoid unintended consequences here, where the conduct at which regulation would be directed largely has not yet occurred. . . . This is the inherent difficulty in regulating

40. *See id.*

41. Roger G. Noll, *Economic Perspectives on the Politics of Regulation*, in 2 HANDBOOK OF INDUSTRIAL ORGANIZATION 1253–87 (Richard Schmalensee & Robert Willig eds., 1989).

42. DENNIS W. CARLTON & JEFFREY M. PERLOFF, MODERN INDUSTRIAL ORGANIZATION ch. 20 (4th ed. 2004).

43. *See generally* Noll, *supra* note 41.

44. *See id.*

based on concerns about conduct that has not occurred, especially in a dynamic marketplace.⁴⁵

Indeed, the FCC itself recognized the severe limits and costs of regulation in the broadband market space:

[B]roadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market. We recognize that substantial investment is required to build out the networks that will support future broadband capabilities and applications. Therefore, our policy and regulatory framework will work to foster investment and innovation in these networks by limiting regulatory uncertainty and unnecessary or unduly burdensome regulatory costs.⁴⁶

Both scholarly research and practical experience with regulation reach the same conclusion: regulation is by necessity a costly process, not to be undertaken without solid empirical proof that the hoped-for benefits outweigh the costs.

The long, depressing history of regulation has taught us two very important lessons that we need to keep firmly in mind at this critical juncture of the Internet. First, when regulators indicate a willingness to intervene in a market, all market participants will turn their attention from satisfying customers to special pleadings to get regulations that favor them and disfavor their competitors. Innovation takes second place to rent-seeking behavior by market participants as they jockey for regulatory advantage.

Second, even regulators who wish to limit the scope of their rules face constant pressure from market participants to expand their regulatory purview to help this or that participant. While the regulators may initially resist this pressure, regulation will inexorably extend to reach the entire industry.⁴⁷

But is there a danger from regulation *now*? Surprisingly, we see the evidence of the pernicious effects of regulation of the Internet even before the regulatory ink has dried, in these very earliest days of Internet regulation. After 40 years of a hands-off-the-Internet policy, the FCC has in

45. FED. TRADE COMM'N, FTC STAFF REPORT, BROADBAND CONNECTIVITY COMPETITION POLICY 155, 157 (2007), available at <http://www.ftc.gov/sites/default/files/documents/reports/broadband-connectivity-competition-policy/v070000report.pdf>.

46. Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, *Notice of Proposed Rulemaking*, FCC 02-42, 17 FCC Rcd. 3019, para. 5 (2002).

47. For instance, in the 1930s, regulated railroads (then treated as natural monopolies) demanded extension of regulation to the nascent trucking industry (which was fully competitive), and they got it. This gave us high trucking rates, the Teamsters, and Jimmy Hoffa, until it was eventually undone 40 years later. See THEODORE E. KEELER, RAILROADS, FREIGHT, AND PUBLIC POLICY 26 (1983) ("As truck competition increased . . . the railroads clamored more and more loudly for placing the trucking industry under the same regulation they were subject to.").

fact decided to regulate the Internet in the form of the Open Internet Order.⁴⁸ Although this rule has yet to be finalized following an appeals court vacating the FCC's earlier rule in January 2014,⁴⁹ there is little doubt that some form of net neutrality will soon be (again) imposed on ISPs.

In 2010, when the FCC put up the "Open for Business" sign by issuing net neutrality rules, the rent-seeking started almost immediately. Level 3 objected to Comcast giving them the paid peering treatment when they started carrying Netflix traffic, a change in traffic balance that, according to common Internet practice, called for payment. Level 3, however, called it a violation of net neutrality and requested the FCC to step in to resolve this dispute.⁵⁰ Then-Chairman Genachowski dismissed the complaint as having nothing to do with net neutrality, but rather interconnection, and foreswore FCC intervention in the dispute.⁵¹ But the Commission may well have no real choice; as net neutrality architect Tim Wu and his colleague Tejas Narechania explained in a letter they sent recently to the FCC, "the Commission now believes that the statutory aims of the Telecommunications Act are more easily met through regulated access rules rather than deregulated access."⁵²

This is not a unique event. Recently, Cogent requested the regulator's help in its disputes with Comcast and Verizon, claiming it was entitled to free interconnection, much as Level 3 complained about four years ago.⁵³ Eventually, the problem was resolved without any customer losing Internet access, but the issue of interconnection has been put on the table. Despite Chairman Genachowski's decision to punt on the interconnection dispute in 2010, the issue is now squarely before the Commission—whether he (or the current Chairman) likes it or not.

It is worth noting that the rent-seeking that the Open Internet Order unleashed represents an attempt to get the FCC to expand its regulatory writ from net neutrality to interconnection. After 30 years of private contracting without complaint, the presence of the regulator elicits rent-seeking attempts aimed at extending regulation further into the Internet. It didn't take long for the two fundamental principles of regulation to show up, did it? This is an object lesson in the political economy of regulation.

This is not a new observation on my part. Carlton and Picker stated the principle most clearly:

Competition is diverted from the marketplace to the regulator's office, and the tools for success—ranging from subtle

48. See *Open Internet Order*, *supra* note 26.

49. *Verizon v. FCC*, 740 F.3d 623, 636–42 (D.C. Cir. 2014).

50. See Faulhaber, *supra* note 25, for details of this dispute.

51. *Id.*

52. Tejas N. Narechania & Tim Wu, *Sender Side Transmission Rules for the Internet*, 66 FED COMM. L.J. 467 (2014).

53. See Om Malik, *Verizon: That Peering Flap (About Netflix) is Cogent's Fault*, GIGAOM (June 20, 2013, 4:06 AM), <https://gigaom.com/2013/06/20/verizon-that-peering-flap-about-netflix-is-cogents-fault/>.

influence to out-and-out bribery—may be very different. Instead, we should regulate only when we must—natural monopoly being the core case—and leave general antitrust doctrine and the court system to handle the rest.⁵⁴

We again seem to be ignoring the wisdom that history teaches us about how regulation evolves, somehow believing that well-intentioned people can regulate lightly, without unintended consequences or politicized rulemaking. We again hear the phrase “light-touch regulation,”—which, like the phrase “jumbo shrimp,” is an oxymoron if there ever was one.

IV. CONCLUSION

Kevin Werbach wrote an excellent article on the demise of the PSTN, and he characterizes the challenge extremely well. But I am disappointed that his long experience with regulation and his extensive track record of first-rate scholarship has not guided him away from recommending that regulation be extended to the Internet so as to “protect” the enduring objectives of the PSTN.

The Internet works. Let it be.

54. Dennis Carlton & Randal Picker, *Antitrust and Regulation*, in *ECONOMIC REGULATION AND ITS REFORM: WHAT HAVE WE LEARNED?* 35 (Nancy L. Rose ed., 2014).