Introduction

On March 9, 2010, the city of Alexandria, Virginia received a letter from Verizon. The letter, signed by Verizon’s Virginia president, Robert Woltz, said that Verizon would not be installing FiOS services in Alexandria. The mayor of Alexandria, William Euille, was disheartened: The city council had already awarded Verizon a contract to install fiber service and had spent hundreds of thousands of dollars negotiating a cable franchise agreement with the company. Verizon, for its part, declared that it was suspending FiOS franchise expansion around the country.

Just one week later, the Federal Communications Commission (FCC) rolled out its National Broadband Plan. The Plan, which was based on the assumption that “broadband is a foundation for economic growth, job creation, global competitiveness and a better way of life,” and was said by the FCC to be “lay[ing] out a bold roadmap to America’s future,” made a host of detailed...
recommendations. These recommendations focused largely on making more spectrum available for wireless broadband use, and reforming the nation’s Universal Service Fund.

The Plan did not discuss net neutrality or competition policy. There were likely good reasons for these omissions. The Commission wanted to be seen as setting forth a vision for the country’s broadband future and was trying to keep any discussion of the newly-contentious subject of net neutrality on a separate, dedicated track. Also, the Commission was not, as of March 2010, eager to address the market structure of high-speed Internet access services.

To the extent that there is humor buried in the details of telecommunications policy, the coincident timing of the Verizon announcement that it was backing away from further FiOS installations and the release of the FCC National Broadband Plan was genuinely funny. The Plan itself contained the punchline:

Analysts project that within a few years, approximately 90% of the population is likely to have access to broadband networks capable of peak download speeds in excess of 50 Mbps as cable systems upgrade to DOCSIS 3.0.7 About 15% of the population is likely to be able to choose between two robust high-speed service services [sic]—cable with DOCSIS 3.0 and upgraded services from telephone companies offering fiber-to-the-premises (FTTP).8

These upgrades represent a significant improvement to the U.S. broadband infrastructure, and consumers who value high download and upload speeds will benefit by having a service choice they did not have before the upgrade. The upgrades may, however, change competitive dynamics. Prior to cable’s DOCSIS 3.0 upgrade, more than 80% of the population could choose from two reasonably similar products ([Digital Subscriber Line (DSL)] and cable). Once the current round of upgrades is complete, consumers interested in only today’s typical peak speeds can, in principle, have the same choices available as they do today. Around 15% of the population will be able to choose

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7. See DOCSIS, TECHFAQ.COM, http://www.tech-faq.com/docsis.html (last visited Nov. 30, 2010) (“Data Over Cable Service Interface Specification (DOCSIS) . . . permits additional high-speed data transfer over an existing cable TV system and is widely used by television operators to offer Internet access through an already existing hybrid fiber coaxial infrastructure.”). DOCSIS 3.0, released in August 2006, allows for bonding together three or more cable channels to use for two-way Internet communications. See Mike Robuck, DOCSIS 3.0 Arrives, CEDMAGAZINE.COM (May 1, 2008), http://www.cedmagazine.com/Article-DOCSIS-3-0-arrives.aspx.

8. Verizon is the only nationwide Fiber-To-The-Home provider in the United States. See FiOS Internet, VERIZON.COM, http://www22.verizon.com/Residential/FiOSInternet (last visited Nov. 29, 2010).
from two providers for very high peak speeds (providers with FTTP and DOCSIS 3.0 infrastructure). However, providers offering fiber-to-the-node and then DSL from the node to the premises (FTTN), while potentially much faster than traditional DSL, may not be able to match the peak speeds offered by FTTP and DOCSIS 3.0. Thus, in areas that include 75% of the population, consumers will likely have only one service provider (cable companies with DOCSIS 3.0-enabled infrastructure) that can offer very high peak download speeds. ... 9

Here is a translation of this section: Where Verizon FiOS service exists, there will be competition with cable Internet access service providers for high-speed Internet access at speeds that are necessary to carry out real-time video conferencing or watch high-definition video. Where FiOS is not installed, there will not be any competition, and consumers will have just one provider to choose from: their local cable monopoly. Most Americans—perhaps as many as 85% of us—will fall into this latter category. As of March 2010, with Verizon’s announcement that it would not be expanding service to their town, the citizens of the City of Alexandria had just joined this group. 10

I. What Just Happened

Not so long ago, copper phone line DSL Internet access connections were roughly comparable to cable modem Internet access connections in terms of their speed and cost. Where there was both a DSL and a cable modem provider in a given locality, the Commission had felt confident that competition would keep prices down and speeds up. This rough parity, on which the complete deregulation of high-speed Internet access from 2002 to 2007 was based, no longer exists. 11

10. See Switzky, supra note 1.
11. See Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, GN Docket No. 00-185, FCC 02-77, Declaratory Ruling and Notice of Proposed Rulemaking, 17 FCC Rcd 4798, ¶ 6 (2002), aff’d, Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Servs., 545 U.S. 967 (2005); see also Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, CC Docket No. 02-33; Universal Service Obligations of Broadband Providers; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services, CC Docket No. 01-337; Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review — Review of Computer III and ONA Safeguards and Requirements, CC Docket Nos. 95-20, 98-10; Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided Via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided Via Fiber to the
It is much more expensive to upgrade existing copper phone line connections to fiber (FiOS) than it is to upgrade cable electronics to DOCSIS 3.0. Copper connections have to be replaced with fiber, and the streets have to be dug up to allow this; cable electronics can be swapped out and upgraded with far greater ease. DSL connections are too slow to be substitutable for DOCSIS 3.0. The economics of cable are far more favorable than those of telephony when it comes to upgrading infrastructure to enable modern-day speeds. The predictable mechanics of natural monopolies were not left behind when we moved to higher-speed Internet access, and the cable industry is well aware of its advantage.

Another fact: The major cable providers in this country do not compete with one another. The operators clustered all cable into regional monopolies during the summer of 1997—Leo Hindery, then-President of Tele-Communications, Inc., and the architect of the effort, calls that summer the “Summer of Love”—pursuing swaps and partnerships that put every market in the United States except four in the hands of a single operator. Clustering continued when bankrupt Adelphia Communication’s assets were divided...
between Comcast and Time Warner Cable in 2006.\textsuperscript{16} In general, non-competing cable systems have at least 70% of the potential video customers in most of the largest metropolitan areas in the U.S.\textsuperscript{17}

Currently, wireless connections do not have adequate capacity to compete with cable’s DOCSIS 3.0 services either.\textsuperscript{18} As the FCC found in the National Broadband Plan, wireless broadband (whether fixed or mobile) is not an effective substitute for high-speed wired service and “may not be an effective substitute in the foreseeable future.”\textsuperscript{19}

When Verizon stepped back from competing with the cable industry in March 2010, effectively sealing the monopoly, the ongoing tussle over net neutrality became just one subpart of an enormous policy question for the country: When there is only one provider in each locality making available the central communications infrastructure of our time, what should the role of government be with respect to that infrastructure? When broadcast, voice, cable, and even newspapers are just indistinguishable bits flowing over a single, monopoly-provided fat pipe to the home, how should public goals of affordability, ubiquity, access to emergency services, and nondiscrimination be served? And what happens to diversity, localism, and the civic function of journalism?

Once the cable digital migration is accomplished, the cable companies’ big pipes will be filled with virtual, highly-compressed digital “channels.” Three of those, or so, may be devoted to Internet access. The real growth area for cable is “broadband,” but very little of “broadband” will be recognizable as Internet access. The rest of the transmissions filling the pipe will use the Internet Protocol but will be thoroughly managed, monetized, prioritized, filtered, packaged, and non-executable—much like traditional cable television today. When a monopoly cable provider can allocate just two or three of its hundreds of virtual “channels” to Internet connectivity, and when only that provider can sell you video-strength speeds, net neutrality becomes a subsidiary issue—a tiny white bird landing on the back of an enormous hippo. Net neutrality matters,

\begin{itemize}
\item \textsuperscript{17} See \textit{ADS and Wired-Cable Penetration by DMA}, TVB.org, http://www.tvb.org/planning_buying/4722/4729/72555 (last visited Nov. 30, 2010).
\item \textsuperscript{18} See Dale N. Hatfield, \textit{The Challenge of Increasing Broadband Capacity}, in \textit{Time Warner Cable Research Program on Digital Communications, The Future of Digital Communications: Technical Perspectives} 16 (Fernando Laguarda ed., 2010) (noting that “over-the-air wireless systems face a significantly harsher signal environment compared to a ‘closed’ coaxial cable-based system carrying RF signals and, in turn, over-the-air wireless systems serving mobile as opposed to fixed terminals face a still harsher signal environment”).
\item \textsuperscript{19} See \textit{National Broadband Plan}, \textit{supra} note 4, at 41.
\end{itemize}
but it is a sideshow. As one content executive told me, “Comcast owns the Internet.”

II. What Happens Next

We are about to confront a well-coordinated cabal of local monopoly cable providers. When it comes to affordability, ubiquity, and nondiscrimination, we could decide to take a lesson from a host of other developed nations—particularly Australia. As a report from the Berkman Center made clear earlier this year, policies requiring line-sharing at regulated rates have played a central role in the spread of low-priced, nondiscriminatory, very-high-speed access in many other nations.20 Australia has recently cleared an important final hurdle towards rolling out a publicly-funded fiber network that will be open to all ISPs: By having its Senate pass a bill that will decommission old copper-wire (and hybrid coaxial fiber) infrastructure and separate its monopoly provider into wholesale and retail operations, Australia has ensured the construction of a new National Broadband Network that will connect 93% of Australian homes and business at speeds of 100 megabits per second.21 Another lesson: Leadership played a central role in this major Australian initiative. Communications Minister Stephen Conroy has been leading the reform effort since 2005, and said recently that “[n]o other sector has been held hostage by a market structure that has been such an impediment to genuine competition and innovation.”22

Provision of emergency services and diverse local content are harder problems, and ensuring the health of news gathering is the hardest of all. But once it is clear that there is a difference between infrastructure and content, it may be easier to visualize solutions. It is beyond the scope of this short piece to do more than flag the issues we will need to confront in the years to come.

III. Calling the Crisis by Name

Labels are important in policy debates. The “broadcast flag” effort was very nearly successful in forcing all devices capable of receiving television broadcasts (including PCs) to be designed in order to protect “flagged” content. Who could be against a flag? By contrast, “net neutrality” advocates have had

difficulty convincing anyone to care about something that sounds so, well, neutral.

One effective label that has often been used during the first two years of the Obama administration is the “looming spectrum crisis.” FCC Chairman Genachowski said in October 2009: “I believe that that the biggest threat to the future of mobile in America is the looming spectrum crisis.” As the crisis loomed, the administration—worried about the lack of spectrum allocated for high-speed Internet access—declared it would re-allocate 500 MHz of spectrum. There is a hunt on for spectrum: Every closet in every agency is being searched. Looming. Crisis.

It may be time for yet another label to enter the lists: “the looming cable monopoly.” It is gaining strength, and it is not terribly interested in the future of the Internet. This is the central crisis of our communications era.
