WORLDCOM

ORIGINAL

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EX PARTE OR LATE FILED

May 21, 2002

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MAY 21 2002

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Suite TW-A325
Washington, D.C. 20554

Re: Ex Parte Letter in CC Docket No. 02-33; CC Docket No. 01-338; CC Docket No. 01-337; CC Docket No. 98-147; CC Docket No. 98-10; CC Docket No. 96-98; CC Docket No. 95-20; CS Docket No. 02-52; GN Docket No. 00-185

Dear Ms. Dortch:

On May 20, 2002, Vint Cerf of WorldCom, Inc. delivered the attached letter to Chairman Michael Powell, with copies delivered to Commissioner Michael Copps, Commissioner Kathleen Abernathy, and Commissioner Kevin Martin, and their wireline competition staff.

Pursuant to Section 1.106(b)(1) of the Commission's Rules, two copies of this letter are being provided to you for inclusion in each of the dockets of the above-referenced proceedings.

Sincerely,

Richard S. Whitt

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Vinton G. Cerf
Senior Vice President
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May 20, 2002

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

The Honorable Michael Powell
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Dear Chairman Powell:

I have watched with considerable interest as the FCC and Department of Commerce grapple with the daunting policy challenges associated with the deployment of broadband services. Having devoted much of my career to the creation and evolution of the Internet, I thought it might be potentially useful to you and Secretary Evans if I outlined my personal vision for the future of high-speed Internet access and my growing concern over proposed changes in public policies regarding broadband deployment. The more comprehensive attached letter to both of you attempts to do just that.

As you move forward with various FCC rulemaking proceedings, I hope you will take these thoughts into consideration. It is my sincere hope that under your Chairmanship the FCC will ensure that the Internet remains openly accessible and continues to flourish.

My letter makes the following central points:

- The policy direction suggested in particular by the broadband "framework" NPRM could have a profoundly negative impact on the Internet, and the availability of the high-capacity telecommunications connections so necessary to its current and future openness and competitive nature.

- The notion that open, nondiscriminatory telecommunications platforms no longer serve the public interest when they are used to provide so-called "broadband" services is mistaken. Preventing competitive telephone companies from leasing elements of the incumbent carriers' networks at cost-based rates to provide competing services, and barring Internet service providers from utilizing the underlying telecommunications services necessary to serve consumers, could deny competitors the very capabilities they need to survive, let alone flourish, in the market. Such an approach would effectively wall off the local telephone network from competitive entry and eviscerate any chance of fostering competition and innovation in these interrelated worlds.

- Contrary to the assumptions of some, "broadband" is no different than "narrowband" in terms of being a bottleneck on-ramp to the Internet that requires appropriate regulation in order to protect consumers and businesses from monopoly abuses. Also, the belief that extension of fiber further into the network somehow creates a wholly new network that should be closed off to competitors is equally without merit.

- The concept of "intermodal" competition, like many appealing notions, appears profound on the surface, but quickly loses credibility upon closer inspection. Potential modalities – such as satellite and fixed wireless systems – offer the future promise of niche services in the broadband market but lack the technical characteristics that would enable them to offer a viable third or fourth alternative to DSL and cable modems.

- There is no possible justification for effectively closing competitors' access to the local telephone network and effectively terminating the robust "intramodal" competition that competitive carriers seek to bring to the market. The residential broadband market is at best a telco/cable duopoly, while the vast majority of American businesses continue to rely solely on the incumbent local telephone network. Open access to all transmission media is the only way to guarantee that every ISP can reach every possible subscriber by every means available.

- The notion that the local telephone companies need any additional incentives to deploy broadband services is especially puzzling. All competitive enterprises know that competition is its own incentive, and no company can afford to sit on the sidelines and watch its competitors take the market. To the extent the ILECs believe they can choose to do so, of course, it is yet another sign that they have market power in providing broadband services. Further, as the Supreme Court just held, the TELRIC standard provides ample compensation to the ILECs for CLECs' use of their facilities. Of course, the fundamental observation is that there is no lack of broadband deployment in the United States; the only cogent public policy issue concerns the competitive deployment of broadband facilities.

In closing, there appears to be no viable reason to step back from the requirements of the Act, the FCC's own pro-competitive legacy, and the pro-competitive economic policies of the Bush Administration, to embrace a future where, at best, consumers can only receive what unregulated monopolies and/or duopolies are willing to give them. Certainly such a retrograde step would not be consistent with my own personal vision.

I hope that you might find these thoughts useful as you undertake your policy deliberations. Please do not hesitate to let me know if further discussion seems merited.

Sincerely,

Vint Cerf

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Senior Vice President
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May 20, 2002

The Honorable Donald Evans
Secretary
United States Department of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

The Honorable Michael Powell
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Dear Secretary Evans and Chairman Powell:

I am writing you both today out of a desire to assist in your deliberations regarding proposed changes in this nation's public policies governing the deployment and use of so-called "broadband" telecommunications technologies. As the Department of Commerce considers adopting a national broadband policy, the Federal Communications Commission has embarked on a number of rulemaking proceedings pertaining to broadband deployment. From my perspective, the Commission appears poised to take certain steps which could undo much of the pro-competitive promise of the Telecommunications Act of 1996, and consign American consumers to a broadband future controlled by the dominant telephone and cable bottlenecks. As I explain below, I believe strongly that U.S. policymakers should heed important historical lessons about the rise and success of the Internet, and ensure that competitors and consumers alike have access to the still-developing broadband world through open, nondiscriminatory telecommunications platforms.

Over the course of twenty-five years of working with the Department of Commerce and the FCC, my experience has proven that regardless of the issue, both agencies have stood steadfastly for a vision of public policy that fosters robust competition and innovation in all Internet and telecommunications-related markets. Over the past few months I have engaged in especially helpful meetings on a number of issues with Assistant Secretary Nancy Victory. I was particularly honored to be included as a participant in her broadband "roundtable" last October, which served as a precursor to the broadband deployment proceeding initiated by NTIA in November. I also was honored to address the Commission this past February as part of the Chairman's "Distinguished Lecture" series, and to have the opportunity to meet and talk with Chairman Powell.

Today, I want to offer you my view of key elements of broadband policy, and convey my concerned observations about several broadband-related regulatory proceedings now underway at the FCC. In my view, the policy direction suggested by these proceedings could have a profoundly negative impact on the Internet, and the availability of the high-capacity telecommunications connections so necessary to its current and future openness and competitive nature. I believe the FCC direction is paradoxically self-inconsistent and at odds with the pro-competition philosophy of the Administration in general.

As both of you may know, I have a long history of involvement in the initiation and growth of the "network of networks" we now call the Internet. I derived great satisfaction as an engineer in the mid-1970s from my collaboration with Bob Kahn on the development of a suite of networking protocols, the Transmission Control Protocol and Internet Protocol ("TCP/IP"). The IP protocol in particular proved to be a remarkably potent realization of a multi-network open architecture. By its very design, the protocol was intended to be ubiquitous and open to all types of applications, carrying all kinds of content, over all forms of transmission technology, by all sorts of service providers. Over the intervening years scores of protocols have been layered on top of IP and its adjunct protocol, TCP -- from the Domain Name System (DNS) protocols to the World Wide Web protocols (notably HTTP) -- but the role of IP as the open standard transcending technologies and modalities remains.

Of course, merely inventing a particular protocol for delivering bits of information from one end of the country to another does not guarantee that one can create applications, services, and content that are able to actually utilize this delivery system. Although the IP protocol has allowed the creation of open, interconnected networks, in reality the networks can only be as open as the various conduits used to reach them. It is here, at the "edge" of these otherwise-open networks, where the dictates of public policy can have such a profound impact. In this regard, the FCC first helped set the stage for small pieces of protocol to leap from blackboards and laboratories into the vibrant marketplace.

The FCC has a long and distinguished legacy of support for non-regulation of information services generally and the Internet in particular. Part of this legacy entails embracing the straightforward concept that all providers of information services, content, and applications have an equal right to use the local telephone network to reach their customers. This policy of nondiscriminatory treatment was established back in the late 1970s in the so-called Computer Inquiry proceedings, and the resulting rules governing how the telephone companies must unbundle and offer their basic transmission services to unregulated enhanced service providers ("ESPs") on the same rates, terms, and conditions that they offer such basic services to themselves. These Computer Inquiry interconnection and unbundling rules have been in place for nearly a quarter century now, and have had a profoundly positive and far-reaching impact on this country's economic and social landscape. In particular, literally thousands of players were free to unleash their creative, innovative, and inspired product and service ideas in the competitive information services marketplace, without artificial barriers erected by the local telephone companies. I am firmly convinced that the Commission's foresight in this area contributed strongly towards the commercial introduction, rise, and incredible success of the Internet.

The 1996 Act built on this regulatory legacy in the information services area (as well as the long distance and equipment markets), by mandating that the local telephone network monopolies be broken open once and for all. Through the establishment of various pro-competitive requirements, such as interconnection, unbundling, collocation, and resale, Congress sought to give would-be competitors the tools they would need to pry open a market that had never seen the light of competition (in that vein, it is especially gratifying that the U.S. Supreme Court last week reaffirmed the FCC's "TELRIC" (Total Element Long Run Incremental Cost) standard as fully consistent with the Telecommunications Act). Indeed, the 1996 Act essentially mirrored the FCC's conclusion in the Computer Inquiry proceedings: access to monopoly-controlled facilities must be provided so that non-monopolies may compete. While we still are a long way from significant competition in the local market, the tools are available – if the regulators are prepared to act on this mandate.

Unfortunately, I am beginning to see troubling signs that the FCC's pro-competitive legacy, and the resulting benefits to American consumers and businesses, may be in serious jeopardy. Over the past few months, the FCC has initiated several interrelated rulemaking proceedings that appear to have at their core the single-minded but mistaken notion that open, nondiscriminatory telecommunications platforms no longer serve the public interest when they are used to provide so-called "broadband" services. In particular, the Commission has suggested an intention to prevent competitive telephone companies ("CLECs") from leasing elements of the incumbent telephone companies' ("ILECs") networks to provide competing services, contrary to the dictates of the Telecommunications Act. Moreover, the Commission has suggested that its longstanding Computer Inquiry rules -- which allow Internet service providers (ISPs") to utilize the underlying telecommunications services necessary to serve consumers -- no longer are necessary in a broadband world. In other words, the FCC appears determined to deny CLECs and ISPs the very capabilities they need to survive, let alone flourish, in the market. Together the proposals, if adopted, would effectively wall off the local telephone network from competitive entry and eviscerate any chance of fostering competition and innovation in these interrelated worlds.

As far as I can discern, the Commission appears to premise its suggested approach on a few key mistaken "factual" assumptions: (1) "broadband" is a different sort of animal from "narrowband;" (2) robust "intermodal" competition exists or soon will exist between different facilities-based providers of broadband services; and (3) the incumbent local phone companies in particular require additional incentives to deploy Digital Subscriber Line ("DSL")-based broadband services. From this engineer's perspective, none of these assumptions have any merit.

First, my engineering training and instincts chafe at the notion that something we choose to call "broadband" is something wholly separate and apart from narrowband or, indeed, from the underlying network that supports it. In the context of the local telephone network, DSL technology is merely the latest in a continuing stream of incremental improvements to the use of the existing telephone network. DSL constitutes a group of copper-based technologies that encompasses a family of related protocols, all of which collectively have one job: transmitting information over existing copper local loops. DSL technologies can do this job at higher bit rates than more traditional "dial-up" modems, but there is little else to distinguish them. Moreover, this transmission path should not in any way be confused with one of the more common applications of DSL: Internet access. While DSL essentially is an "edge" technology that can be and is used to reach the Internet, DSL is not in any way equivalent to the Internet. Building an anticompetitive telecommunications policy around the ordinary capabilities of DSL, and one of its many applications, makes no sense to me. Also, the notion that extension of fiber further into the network somehow creates a wholly new network that should be closed off to competitors is equally without merit.

This observation is particularly crucial in the context of new "last mile" access technologies such as Gigabit Ethernet ("GE"). There are two important facts to keep in mind about GE as a means of accessing data networks: (1) it is a thousand times faster than the best cable modem or DSL services, and (2) it is symmetric, meaning it can deliver data at these same speeds in both directions. These are vital differences from currently available high-speed access technologies that tend to be asymmetric, typically supporting higher delivery speeds towards subscribers and slower ones from them. The significant point, of course, is that all of these various "competing" services are delivered on monopoly-controlled channels.

Second, the concept of "intermodal" competition, like many appealing notions, appears profound on the surface, but quickly loses credibility upon closer inspection. Physics gets in the way of the supposed competition. It is true that the phone companies and cable companies compete today in many places to provide high-speed, asymmetric Internet access to residential customers. However, this competition is not ubiquitous. Even with comparatively wider coverage, DSL is still not available to many consumers because of distance from their central offices, while some cable providers may not have invested in the requisite hybrid fiber/coax technology to provide cable modem service.

Moreover, other potential modalities – such as satellite and fixed wireless systems – lack the technical characteristics that would enable them to offer a viable third or fourth alternative to these near-ubiquitous modalities. In particular, satellite-based broadband service (1) is only available by line-of-sight, (2) is vulnerable to precipitation effects and latency problems, (3) utilizes expensive or inefficient technology (including either costly two-way dishes or separate telephone "dial-up" return), and (4) typically yields lower quality and bandwidth. Fixed wireless service (such as MMDS) possesses many of the same technical drawbacks as satellite service, as well as the additional factors of the limited availability of spectrum and shared spectral bands. In short, while these technologies offer the promise of niche services in the broadband market, neither comes close to the widespread reach of the local telephone networks and cable networks.

At best, the residential broadband market is a duopoly—and in the worst case, consumers have only one choice or, in poorly served areas, ***no*** choice at all. This circumstance seems hardly likely to result in driving the benefits of lower prices and innovative service offerings that would come from a more thoroughly competitive market. Indeed, the Consumer Federation of America recently released a detailed report exposing the myth of intermodal competition in the residential high-speed Internet market, and demonstrating the negative consequences to consumers of a cable/telco duopoly. In addition, cable systems generally do not serve businesses, so the vast majority of American businesses continue to rely solely on the incumbent local telephone network. In my view, then, there is no possible justification for effectively closing competitors' access to this network that would result in termination of the robust "intramodal" competition that CLECs seek to bring to the market. Indeed, I am persuaded that open access to ***all*** transmission media is the only way to guarantee that every ISP can reach every possible subscriber by every means available. Of course, open access does not mean free access. The suppliers of the alternative transmission media should be fairly compensated for providing such access, as required by the Telecommunications Act. As the Supreme Court held last week, the TELRIC standard provides ample compensation to the ILECs for CLECs' use of their facilities.

Third, I am genuinely puzzled by the notion that the local telephone companies need any additional incentives to deploy broadband services. To begin with, as all competitive enterprises know well, competition is its own incentive. The local telephone companies claim they are battling fiercely with the cable companies, and the few remaining CLECs, to provide broadband services to American consumers. In such an environment, no company can afford to sit on the sidelines and watch its competitors take the market. To the extent the ILECs believe they can choose to do so, of course, it is yet another sign that they have market power in providing broadband services.

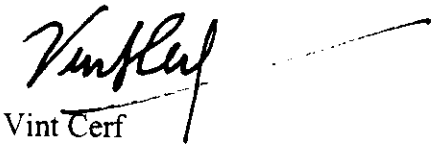
In addition, the ILECs' argument that they are not adequately compensated for providing wholesale broadband functionalities, which in turn fails to stimulate facilities-based investment by both ILECs and CLECs, does not bear close scrutiny. No less an authority than the Supreme Court concluded that the ILECs' "lack of incentives" argument "founders on fact." Among other things, the TELRIC standard includes direct and overhead costs, depreciation expense, and risk-adjusted cost of capital. As Justice Souter observed, "TELRIC rates leave plenty of room for differences in the appropriate depreciation rates and risk-adjusted capital costs depending on the nature and technology of the specific element to be priced." The Court ultimately determined that it is reasonable to prefer TELRIC over "alternative fixed-cost schemes that preserve home-field advantages for the incumbents."

More fundamentally, however, there is no lack of broadband deployment. As Assistant Secretary Victory, Under Secretary Bond, and FCC officials uniformly have attested in recent months, broadband deployment in this country is robust. Current figures from numerous studies demonstrate that between 70 to 85 percent of all Americans have ready access to some broadband services. If their claims to shareholders and Wall Street are any indication, the ILECs certainly show no signs of slowing deployment, especially as a result of complying with the Act. Any public policy issue pertaining to broadband should focus on the comparatively low take-rates (somewhere around 10 percent of American consumers). Excessive pricing by the two dominant providers, and a lack of compelling consumer applications, are market realities that cannot be blamed on pro-competitive regulation.

Thus, there appears to be no viable reason for the FCC to step back from the requirements of the Act, its own pro-competitive legacy, and the pro-competitive economic policies of the Bush Administration, to embrace a future where, at best, consumers can only receive what unregulated monopolies and/or duopolies are willing to give them. Certainly such a retrograde step would not be consistent with my own personal vision. I am well aware that some may not share my conviction that consumers are best served by open platforms spread across many competing modalities. Nonetheless, should the United States Government decide that it does not have the will or inclination to require that one of the two dominant modalities -- cable -- create an open platform, it should not lack the wisdom to ensure that the one remaining platform -- telephony -- remains open to all. In fact, as I have suggested above, the openly accessible platform of all modalities is the heart and soul of the Internet, and was Congress' intention for the local telecom market when it adopted the Telecommunications Act.

I thank both of you for your attention to this most important public policy matter. I look forward to the opportunity to discuss with you and your staff the constructive ways in which the U.S. Government can help promote and defend competition and innovation within the telecommunications networks residing at the "edge" of the dynamic -- and open -- Internet.

Sincerely,



Vint Cerf