

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)
)
Framework for Broadband Internet Service) GN Docket No. 10-127
)
)

COMMENTS OF CISCO SYSTEMS INC.

Cisco Systems, Inc. (“Cisco”)¹ takes this opportunity to urge caution as the Federal Communications Commission (“Commission”) considers the issues raised by the Notice of Inquiry in this docket.² The Commission’s longstanding approach to broadband service has been immensely successful in promoting the deployment of such networks, and, if preserved, is likely to fuel the additional private-sector network investment needed to accommodate expected growth in Internet use. In contrast, Cisco fears, the proposed “Third Way” framework could diminish private-sector investment, undercutting deployment at a critical time in the Internet’s development. In any case, broadband Internet access remains an integrated information service, and the rationale for the Commission’s earlier decisions on this point is, if anything, stronger than it was before. Finally, there is little need for the Commission to pursue this untested approach: It retains sufficient legal authority to undertake the most important aspects of its broadband policy agenda, and, to the extent it does not, it both can and should seek explicit authority from Congress.

¹ Cisco is the world’s largest provider of networking technology, equipment, solutions and services used in the construction and management of next-generation broadband networks.

² *Framework for Broadband Internet Service*, GN Docket No. 10-127, Notice of Inquiry, FCC 10-114 (rel. June 17, 2010) (“NOI”).

**I. THE REVISED FRAMEWORK CONTEMPLATED BY THE NOI
THREATENS TO REDUCE BROADBAND INVESTMENT,
INNOVATION, AND DEPLOYMENT**

As the National Broadband Plan recognizes, private investment has been, and will continue to be, the key to broadband deployment in the United States.³ In barely ten years, this investment has created a remarkably robust and competitive broadband ecosystem, virtually from scratch. The Plan found that 82 percent of housing units are served by two or more fixed broadband providers, and that 89 percent of the American population is served by two or more 3G wireless broadband providers.⁴ Other Commission data shows that, as of December 31, 2008, more than 96 percent of census tracts were served by two or more fixed broadband providers, more than 80 percent were served by three or more, and more than half were served by four or more.⁵ In addition to these “wired” providers, 89.5 percent of Americans are served by two or more mobile broadband providers, 76.1 percent by three or more, and 58 percent by four or more.⁶

However, more investment is needed to bridge the broadband “availability gap.”⁷ While the Plan proposes reform of the universal service fund and contemplates additional public subsidies, future broadband investment is likely to come principally from the private sector, as

³ See FED. COMM’NS COMM’N, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN, XI (Mar. 16, 2010) (“Plan” or “NBP”) (recognizing that deployment has been “[f]ueled primarily by private sector investment and innovation”).

⁴ See *id.* at 37, 40.

⁵ See INDUS. ANALYSIS AND TECH. DIV., WIRELINE COMPETITION BUREAU, FED. COMM’NS COMM’N, HIGH-SPEED SERVICES FOR INTERNET ACCESS: STATUS AS OF DECEMBER 31, 2008, 33 (Feb. 2010) (Table 13).

⁶ See *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, et al.*, WT Dkt. No. 09-66, Fourteenth Report, FCC 10-81, Table 7 (rel. May 20, 2010).

⁷ See generally NBP, *supra* note 3, at Chapter 8.

the Plan recognizes.⁸ Furthermore, deployment efforts aimed only at the unserved and underserved will be inadequate, given massive expected growth in Internet traffic in the coming years. According to Cisco's Visual Networking Index ("VNI"), the company's ongoing effort to forecast and analyze the growth and use of IP networks worldwide,⁹ global IP traffic will increase by a factor of four from 2009 to 2014, approaching 64 exabytes (i.e., 64 billion gigabytes) per month in 2014, compared to approximately 15 exabytes per month in 2009. By 2014, annual global IP traffic will reach almost three-fourths of a zettabyte (767 exabytes, or 767 billion gigabytes).¹⁰ Moreover, global *mobile* data traffic will double every year through 2014, increasing 39 times between 2009 and 2014.

These figures underscore just how important it is that private actors retain the flexibility to innovate, invest, and deploy facilities to meet tremendous growth in demand. The steps contemplated in the NOI, however, could reduce this flexibility, placing future investment in jeopardy. The deployment figures cited above reflect the wisdom of the Commission's current approach – a framework premised first and foremost on the view that broadband Internet services are integrated “information services,” beyond the reach of monopoly-era requirements designed for providers of analog, narrowband telephony.¹¹ Even as proposed, the “Third Way” would constitute a momentous break from this approach, subjecting broadband Internet access to a

⁸ See, e.g., *id.* at XV, 9, 143.

⁹ See Visual Networking Index, *available at* http://www.cisco.com/en/US/netsol/ns827/networking_solutions_sub_solution.html#~forecast (last visited July 14, 2010) (estimating future global IP traffic growth).

¹⁰ One exabyte equals one billion gigabytes; one zettabyte equals one trillion gigabytes.

¹¹ Additionally, the Commission's restraint with respect to other information services has also facilitated the development of an extremely varied and innovative market for those offerings, ranging from email and e-commerce sites to mobile “apps” to products such as videoconferencing and virtual telepresence. Cisco applauds the Commission's clear statement that the classification of such services is not at issue in this docket. See NOI at ¶ 107.

variety of new, open-ended obligations, altering the calculus governing providers' investment decisions, and muting deployment just as demand appears poised to skyrocket.

In particular, the uncertainty caused by application of Sections 201 and 202, enforced via a post-hoc Section 208 complaint process, will deprive providers of any comfort regarding the range of permissible activities. Because the complaint process opens any practice to challenge at any time, the risks posed will never abate, even years after the regime is set in place. This uncertainty is likely to deter investment even amidst assurances that the Commission will apply Sections 201 and 202 sparingly, because such promises cannot bind future Commissions (to say nothing of reviewing courts), and investors evaluating today's business opportunities must necessarily account for tomorrow's risks.¹²

Further, the uncertainties associated with future "unforbearance" or judicial review of initial decisions could chill investment even more than the "Third Way" as proposed. Although the Commission has never been reversed on a forbearance grant and has never "unforborne," the NOI contemplates forbearance far more sweeping than any that the Commission has undertaken since Section 10 was adopted. Future courts or Commissions might therefore scrutinize the forbearance decisions proposed here more aggressively than prior forbearance grants, subjecting investors to still more risk.¹³

¹² Uncertainty will most severely affect projects for which the business case only barely supports deployment – i.e., high-cost areas that are unlikely to enjoy broadband service today. The Third Way, therefore, threatens to deprive unserved and underserved Americans of deployments that, but for the new regulatory risks, would have been economically feasible.

¹³ Just last month, this Commission indicated that it was considering whether to reverse a previous forbearance grant. *See Petition of Qwest Corporation for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Phoenix, Arizona Metropolitan Statistical Area*, WC Dkt. No. 09-135, Memorandum Opinion and Order, FCC 10-113, ¶ 34 (rel. June 22, 2010) (refusing to "prejudge" pending petition seeking reversal of 2005 forbearance grant).

II. THERE IS NO TECHNICAL OR OTHER BASIS FOR IDENTIFYING A DISTINCT “TRANSMISSION” COMPONENT TO BROADBAND INTERNET ACCESS

The “Third Way” is premised on a Commission finding that broadband Internet service is *not* an integrated information service, but rather the joint provision of two separate offerings: (1) an information service that rides over (2) a common-carrier transmission offering. There is no basis for this conclusion. In 2002’s *Cable Modem Order*, the Commission found that cable modem service constituted an “integrated information service” because it offered access to “E-mail, newsgroups, the ability for the user to create a web page that is accessible by other Internet users, and the DNS,”¹⁴ each of which satisfied the Act’s “information service” definition.¹⁵ This classification applied “regardless of whether subscribers use all of the functions provided as part of the service, such as e-mail or web-hosting, and regardless of whether every cable modem service provider offers each function that could be included in the service.”¹⁶ As the Commission made clear, a cable modem provider “is not offering telecommunications service to the end user, but rather is merely using telecommunications to provide end users with cable modem service.”¹⁷ The Supreme Court affirmed this reasoning in *Brand X*,¹⁸ and the Commission relied on the same logic with respect to broadband services offered over wireline, wireless, and BPL platforms.¹⁹

¹⁴ *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, 17 FCC Rcd 4798, 4822 ¶ 38 (2002) (“*Cable Modem Order*”).

¹⁵ 47 U.S.C. § 153(20).

¹⁶ *Cable Modem Order*, 17 FCC Rcd at 4822-23 ¶ 38.

¹⁷ *Id.* at 4824 ¶ 41.

¹⁸ *Nat’l Cable Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967 (2005) (“*Brand X*”).

¹⁹ See *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, 22 FCC Rcd 5901 (2007); *United Power Line Council’s Petition for Declaratory Ruling Regarding the Classification of Broadband Over Power Line Internet Access Service as* (continued on next page)

The rationale detailed above is at least as strong today as it was in 2002. Internet access *remains* an integrated offering that intertwines transmission with protocol conversion, storage and retrieval of information, DNS resolution, caching, network security, and other functions to enable access to email, web browsing, file-sharing, and other offerings. If anything, consumers are more apt to view Internet access as a single integrated offering today,²⁰ because typical Internet users rely on facilities-based Internet Service Providers (“ISPs”) offering integrated services, *not* (as in 2002) on dial-up connections provided by an entity other than the ISP. Moreover, broadband ISPs are increasingly integrating processing functionality and last-mile data transmission to serve customer needs. For example, ISPs have “pushed” intelligence toward the edge of the network to help block spam, arrest the spread of malware and viruses, and improve quality of service. The fact that some entities may provide piece-parts of this service is not a proper basis for denying that broadband Internet access is an integrated information service when packaged and offered as such.²¹ As the NOI recognizes, information services by definition involve the use of telecommunications. That “telecommunications” can always be provided on its own, just as enhanced service providers have always been able to offer processing that must be accessed via third-party transmission. When offered together, however, these pieces comprise an integrated information service, even if the user relies on third-party applications as substitutes for the ISP’s.²²

an Information Service, 21 FCC Rcd 13281 (2006); *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, 20 FCC Rcd 14853 (2005).

²⁰ See, e.g., *Brand X*, 545 U.S. at 976, 990 (describing and ratifying relevance of customer perception to the classification analysis).

²¹ See NOI, *supra* note 2, at ¶ 58.

²² As noted above, the *Cable Modem Order* made clear that classification does not hinge on “whether subscribers use all of the functions provided as part of the [packaged] service.” *Cable Modem Order*, 17 FCC Rcd at 4822 ¶ 38. Nor has the stand-alone availability of processing ever driven the Commission’s analysis of an integrated offering. Rather, Commission decisions

(continued on next page)

Finally, the Commission faces an especially high burden in justifying any change in course here. The Supreme Court has stated that an agency’s reversal of its prior decision may require “a more detailed justification than what would suffice for a new policy created on a blank slate” when “its new policy rests upon factual findings that contradict those which underlay its prior policy” or “its prior policy has engendered serious reliance interests that must be taken into account.”²³ Here, both of the conditions apply. The “Third Way” would involve a reversal of prior factual determinations regarding the extent to which broadband Internet service is a single integrated offering, and would upset providers’ reliance on the existing regime – reliance that led directly to the massive investment discussed above.

III. THE COMMISSION CAN ATTAIN ITS CORE POLICY GOALS VIA A COMBINATION OF ITS OWN EXISTING AUTHORITY AND, WHERE NECESSARY, NEW CONGRESSIONAL ACTION

Ultimately, there is no reason for the Commission to pursue the Third Way. The Commission’s core broadband policy goals, including many of the NBP’s central recommendations, remain within its reach under the current classification framework. To the extent certain goals are beyond the scope of the Commission’s existing jurisdiction, the Commission should await explicit authority from Congress.

finding that offerings were properly viewed as “severable” have generally been based on conclusions that customers were principally interested in placing traditional telephone calls, not in accessing any enhanced capabilities offered by the service – a conclusion not applicable to broadband Internet access. *See, e.g., AT&T Corp. Petition for Declaratory Ruling Regarding Enhanced Prepaid Calling Card Services*, 20 FCC Rcd 4826, 4831 ¶ 16 (2005) (“From the customer’s perspective, the advertising message is merely a necessary precondition to placing a telephone call and therefore the service should be classified as a telecommunications service.”); *Regulation of Prepaid Calling Card Services*, 21 FCC Rcd 7290, 7296 ¶ 16 (2006) (“[M]enu-driven calling cards offer customers a telecommunications service that enables them to make telephone calls, and the ability to obtain sports scores, stock quotes, and other information through the same card does not alter that conclusion.”).

²³ *FCC v. Fox Television Stations*, 129 S. Ct. 1800, 1811 (2009).

First, many of the Commission’s core policy goals can be achieved through application of the Commission’s existing authority. Perhaps most critically, Section 254 authorizes the Commission to take “into account advances in telecommunications and *information technologies and services*” in determining which services should be supported by the universal service fund,²⁴ and directs the Federal-State Joint Board to “recommend changes to . . . the definition of the *services* that are supported by Federal universal service support mechanisms,” without limitation to “telecommunications services.”²⁵ The Act likewise states that the Commission and Joint Board “shall base [universal service] policies” on, among other things, Congress’s view that “[a]ccess to advanced telecommunications and information services should be provided in all regions of the Nation.”²⁶ These provisions permit a Commission interpretation of Section 254 allowing support for broadband. They are bolstered, moreover, by Section 706 of the 1996 Act, which directs the Commission to encourage deployment of advanced telecommunications services to all Americans on a reasonable and timely basis.²⁷ The Commission also retains authority to effectuate a great majority of the NBP’s spectrum-related recommendations;²⁸ to revisit its wholesale and infrastructure-access policies; and to otherwise facilitate broadband deployment.

Finally, to the extent the Commission wishes to undertake activities not within its statutory mandate under the existing “information service” framework, it should await action by Congress expressly granting such authority. The NBP included more than 40 recommendations

²⁴ 47 U.S.C. § 254(c)(1) (emphasis added).

²⁵ *Id.* § 254(a)(1) (emphasis added).

²⁶ *Id.* § 254(b)(2).

²⁷ *See id.* § 1302.

²⁸ *See* NBP, *supra* note 3, at Chapter 5; 47 U.S.C. § 301 *et seq.*

to Congress,²⁹ reflecting a clear understanding that broadband policy will require Congressional action and oversight. And, indeed, Congressional leaders have begun to consider comprehensive telecommunications reform legislation.³⁰ In addition, Congress is now considering bills addressing specific issues, including cybersecurity and data privacy,³¹ Internet video captioning,³² consumer disclosure with regard to broadband service,³³ and the creation of a support mechanism to promote broadband adoption by low-income Americans.³⁴ Given these developments, and concerns raised by many Senators and Representatives regarding the proposed “Third Way,”³⁵ the Commission should await Congressional guidance before dramatically altering its framework for broadband regulation.

CONCLUSION

For the foregoing reasons, Cisco encourages the Commission to exercise great caution in this proceeding. The “Third Way” would represent a precipitous break from current policy, and could impede investment in the American communications infrastructure. Such a departure is

²⁹ Among the NBP chapters including recommendations, only one – Chapter 17, addressing “Implementation and Benchmarks” – does not include any recommendations to Congress.

³⁰ See, e.g., Adam Bender, Howard Buskirk & Jonathan Make, *Hill Democrats Seek to Revamp Communications Act*, COMMUNICATIONS DAILY, May 25, 2010).

³¹ See, e.g., Data Breach Notification Act, S. 139, 111th Cong. (2010); Cybersecurity Act of 2009, S. 773, 111th Cong. (2010); Personal Data Privacy and Security Act of 2009, S. 1490, 111th Cong. (2010); Juvenile Justice and Delinquency Prevention Reauthorization Act of 2008, S. 3155, 111th Cong. (2010); Protecting Cyberspace as a National Asset Act of 2010, S. 3480, 111th Cong. (2010).

³² See Twenty-first Century Communications and Video Accessibility Act of 2009, H.R. 3101, 111th Cong. (2010); Equal Access to 21st Century Communications Act, S. 3304.

³³ See Broadband Service Consumer Protection Act, S. 3110, 111th Cong. (2010).

³⁴ See Broadband Affordability Act of 2009, H.R. 3646, 111th Cong. (2010).

³⁵ See Letter from Senator Sam Brownback *et al.*, U.S. Senate, to the Honorable Julius Genachowski, Federal Communications Commission (May 24, 2010); Letter from the Honorable Al Green *et al.*, U.S. House of Representatives, to the Honorable Julius Genachowski, Chairman, Federal Communications Commission (May 24, 2010); Letter from the Honorable Joe Barton, *et al.*, U.S. House of Representatives, to the Honorable Julius Genachowski, Chairman, Federal Communications Commission (May 28, 2010).

both unwarranted and unnecessary, given the Commission's existing authority. To the extent the Commission requires additional jurisdiction over broadband, it should seek such authority from Congress.

Respectfully submitted,

CISCO SYSTEMS, INC.

By: _____
Jeffrey A. Campbell
1300 Pennsylvania Avenue, NW
Suite 250
Washington, D.C. 20004
(202) 354-2920

July 15, 2010