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April 23, 1997

VIA HAND DELIVERY

Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, D.C. 20554

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APR 23 1997
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Re: Reply Comments of the Commercial Internet eXchange Association
Usage of the Public Switched Network by Information Service and Internet Access Providers, CC Docket No. 96-263

Dear Mr. Caton:

Attached please find an original and sixteen (16) copies of the Reply Comments of the Commercial Internet eXchange Association and attachments for submission in the above-referenced proceeding. Also attached, please find a computer diskette containing a copy of the Reply Comments.

Please refer all questions concerning this filing to the undersigned.

Sincerely,

Victoria A. Schlesinger

VAS/ab
Enclosures

No. of Copies rec'd 0+16
List A B C D E

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Access Charge Reform	)	CC Docket No. 96-262
	)	
Price Cap Performance Review for Local Exchange Carriers	)	CC Docket No. 94-1
	)	
Transport Rate Structure and Pricing	)	CC Docket No. 92-213
	)	
Usage of the Public Switched Network by Information Service and Internet Access Providers	)	CC Docket No. 96-263

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REPLY COMMENTS OF THE
COMMERCIAL INTERNET EXCHANGE ASSOCIATION

Respectfully submitted,

Robert D. Collet
Chairman of the Board
Commercial Internet eXchange
Association

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April 23, 1997

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REPLY COMMENTS OF THE
COMMERCIAL INTERNET EXCHANGE ASSOCIATION

I. Introduction and Summary

The Commercial Internet eXchange Association ("CIX"), by its attorneys, replies to the comments filed in response to the Commission's Notice of Inquiry[1] in the above-captioned dockets.[2] The record in this proceeding demonstrates that imposing access charges, whether before or after the conclusion of access charge reform, would discourage, rather than support, development of the Internet, thereby disserving the Commission's goals as set forth in the NOI. NOI at ¶ 315. Furthermore, such charges would bear little relationship to advancing the

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1 Notice of Proposed Rulemaking, Third Report and Order, and Notice of Inquiry, CC Dkt. Nos. 96-262, 94-1, 91-213, 96-263, at ¶¶ 311-318 (rel. Dec. 24, 1996) ("NOI").

2 These comments represent the views of CIX as a trade organization and are not necessarily those of individual CIX members.

Commission's goal of facilitating the development of higher bandwidth data networks. Id. at ¶ 311.

Instead, market forces in the vibrant, highly competitive Internet market and the advent of competition in local telecommunications markets hold far greater promise for achieving the Commission's stated goals of deploying higher bandwidth and avoiding public switched telephone network ("PSTN") congestion. The Commission can best assist market forces by preserving vibrant competition for Internet services through retention of the ESP exemption and by updating its ONA and CEI rules in the Computer III Further Remand proceeding[3] to permit ISPs to obtain alternative access arrangements with ILEC facilities. CIX looks forward to participating in this proceeding, and to working with local carriers to explore ways that the marketplace can promote digital access and higher bandwidth to residences and businesses in the U.S., while maximizing the efficiency of the PSTN.

Section I of these Reply Comments discusses the claims made by participants supporting termination of the ESP exemption, and concludes that no participant has offered a persuasive reason to assess access charges against ISPs. It explains that there is not a significant PSTN congestion problem attributable to Internet usage, that imposing access charges against ISPs would not promote higher bandwidth or more efficient technological alternatives to Internet access, and that imposing such charges would reduce competition in the Internet marketplace and slow development of the Internet in contravention of the Commission's stated goals for this proceeding. Section II explains that market forces, supplemented by pro-competitive regulation to allow alternative access arrangements, rather than access charges, hold the greatest promise for

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3 In the Matter of Computer III, Further Remand Proceeding: Bell Operating Company Provision of Enhanced Services, Notice of Proposed Rulemaking, CC Dkt. No. 95-20, FCC 95-48 (rel. Feb. 21, 1995) ("Computer III").

the development of higher bandwidth data networks. Lastly, CIX reaffirms its commitment to develop alternative access arrangements in order to make more efficient use of the PSTN.

DISCUSSION

II. No Commenter Has Offered A Persuasive Reason to Assess Charges Against ISPs

The Commission has now received three rounds of comments addressing whether Internet service providers ("ISPs") should be obliged to pay access charges, at either pre-reform or post-reform rates, to ILECs. None of the arguments advanced in favor of overturning the ESP exemption, which has played such a salutary role in the development of the "highly competitive and dynamic" Internet access market,[4] justifies reversing course to impose access charges upon ISPs.

A. There Is Not A Significant "Internet Congestion" Problem Requiring Commission Intervention

As the clear majority of comments indicates, ILEC claims of Internet congestion are either unsupported or exaggerated.[5] The studies presented to the Commission and to the press in advance of this proceeding to justify an end to the ESP exemption are based upon highly selective evidence involving localities with anomalously high on-line usage.[6] As AT&T, a

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4 Notice of Proposed Rulemaking, Third Report & Order, CC Dkt. 96-262, at ¶ 285.

5 See, e.g., Comments of AT&T Corp. at 22 ("AT&T Comments"); Comments of CAIS, Inc. at 8 ("CAIS Comments"); Comments of Hardy & Ellison, P.C. at 5 ("Hardy & Ellison Comments"); Comments of the Internet User Coalition at 22-25 ("Internet User Comments"); Comments of Juno Online Services, L.P. at 9 ("Juno Comments"); Comments of NetAction, Utility Consumers' Action Network, Computer Professionals for Social Responsibility and Community Technology Centers' Network at 10 ("NetAction Comments"); Comments of the Pennsylvania Internet Service Providers at 6 ("PA-ISP Comments"); Comments of WorldCom, Inc. at 20-21 ("WorldCom Comments").

6 See Comments of the Commercial Internet eXchange Association at 8 ("CIX Comments"); AT&T Comments at 22 (citing Lee Selwyn and Joseph Laszlo, "The Effect of

(Footnote continued to next page)

supporter of the BOC position on charges for ISPs, observes, ILEC studies purporting to show network congestion are "based on a very small set of selectively chosen exchanges where congestion was abnormally high."[7] Even Southwestern Bell concedes that some stresses on the network are "localized."[8] Thus, contrary to ILEC assertions, network congestion is not a significant problem warranting intervention by the Commission. Apart from isolated instances and anecdotes, the ILECs have failed to provide any accurate, empirical evidence of significant network congestion.[9] Moreover, rhetoric about "Internet congestion" is prone to confusing the issue of congestion on ISPs' private data networks with the separate question of PSTN congestion.[10]

Some parties assert that, while network congestion is not currently significant, the continuing growth of Internet use will create a risk of congestion in the *future*.[11] This argument fails to account for the advent of local competition, which will offer many new delivery mechanisms for Internet traffic, including CLEC,[12] cable television,[13] and wireless capacity.[14]

(Footnote continued from previous page)
Internet Use on the Nation's Telephone Network," Economics and Technology, Inc. (Jan. 22, 1997)).

7 AT&T Comments at 22. See also Comments of MCI Communications Corp. at 21 ("MCI Comments").

8 Comments of Southwestern Bell Telephone Company at 9 ("SWBT Comments").

9 See CIX Comments at 8; Internet User Comments at 23.

10 See Internet User Coalition at 23-24 (stating that ILEC claims of network congestion confuse congestion on private Internet networks with congestion on the PSTN); Hardy & Ellison at 5-6 (noting that "much of the congestion discussed in the media involves congestion on the Internet itself, not on the PSTN").

11 See, e.g., AT&T Comments at 22; SWBT Comments at 9-10.

12 See, e.g., WorldCom Comments, at 18-19 & Attachment C (discussing CLEC service to route Internet traffic around ILEC bottlenecks).

All these new competitors are equipped to play a meaningful role in preventing congestion problems that may arise in the future.[15] Moreover, some of these alternatives offer substantially greater bandwidth than dial-up service over the PSTN.[16]

Clearly, the isolated and unsubstantiated claims of current PSTN network congestion are not enough to warrant the imposition of access charges.

B. Proponents of Access Charges Have Failed To Demonstrate that Access Charges Would Promote Higher Bandwidth or More Efficient Internet Access

1. The ILECs Seek To Be Compensated In Advance For Data Networks That Have Not Been Tested In The Marketplace.

Several of the ILECs attempt to justify access charges as necessary to cover the costs of network investments, claiming that they "lack the resources to address the increasing demands placed on their networks."[17] However, instead of recognizing the increased demand for data services as a revenue opportunity that requires investment, the ILECs are requesting that the ISPs in essence fund the development of their advanced services.[18] This approach is fundamentally

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(Footnote continued from previous page)

13 See, e.g., Comments of the National Cable Television Association at 6-8 (discussing cable-provided Internet access as an attractive alternative to current Internet access options) ("NCTA Comments").

14 See Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service, Report and Order, GN Dkt. No. 96-228, FCC 97-50 (rel. Feb. 19, 1996).

15 See CIX Comments at 10-11.

16 Id. at 7; NCTA Comments at 6.

17 Comments of GTE, Corp. at 7 ("GTE Comments"). See also SWBT Comments at 5; Comments of Pacific Telesis at 5 ("PacTel Comments").

18 CIX Comments at 8.

inconsistent with the functioning of a competitive marketplace.[19] Competitive market participants make investments to respond to customer demand, not because regulators have decreed that the prices of alternative services should be increased to create a market for the services.[20]

The ILECs' approach is particularly suspect because many of these services are not yet available and are totally untested in the marketplace. Several of the ILECs who discuss details of advanced service offerings admit that such services are not actually available. Bell Atlantic/NYNEX, for instance, states that it is "investigating" technological alternatives, but has not committed to their deployment.[21] Pacific Bell also states that it is "developing" service solutions, such as its "Data Access Gateway" and xDSL technologies.[22] Pacific Bell notes, however, that "Data Access Gateway" is "*expected* to be available in parts of Pacific Bell's territory in mid-summer 1997, *pending* successful technology tests and regulatory approvals."[23] GTE's "data friendly" technologies are likewise deemed "experimental."[24] According to the ILECs, ISPs should pay access charges to encourage them to migrate to these new ILEC services even though there is little or no evidence that these services meet market demand or that the ILECs themselves are firmly committed to their deployment.

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19 See MCI Comments at 3 (stating that the "RBOC proposals turn the notion of the competitive market on its head").

20 See Comments of Teleport at 6 ("Teleport Comments").

21 See Joint Comments of Bell Atlantic and NYNEX at 11, Attachment E ("Bell Atlantic/NYNEX Comments").

22 PacTel Comments at 36.

23 Id. (emphasis added).

24 GTE Comments at 5.

In addition, even if the ILECs were permitted to collect revenues via access charges, there is no guarantee that the ILECs would use these additional revenues to develop high bandwidth services or invest those revenues in any advanced access services.[25] Indeed, the ILECs are notably silent about how they would use extra revenues from Internet charges.

2. ILECs Have Not Priced Or Offered Their Existing Data Networks To Present A Viable Alternative To Use Of The PSTN.

Many ILECs claim that, absent changes to the existing pricing scheme, ISPs will not embrace new technologies, choosing instead to make greater use of local business lines.[26] In support of this assertion, they argue that ISPs do not take advantage of alternative access technologies that the ILECs are offering.[27] In assessing this contention, it is important to consider the nature of these services -- which appear typically to be designed for the benefit of the ILEC's own Internet affiliates, rather than to meet market demand among independent ISPs who must compete with those affiliates. In fact, the high price, incompatible technical requirements, and inflexible terms and conditions for such services would make it highly inappropriate for the Commission to impose regulatory charges to pressure ISPs to accept these ILEC offerings.

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25 See CIX Comments at 8.

26 See, e.g., Bell Atlantic/NYNEX Comments at 12-13; GTE Comments at 6.

27 See Bell Atlantic/NYNEX Comments at 13 (stating that "none" of the large ISPs have subscribed to its new packet-based Internet access service). Later, however, Bell Atlantic admits that the demand for trunk side connections by ISPs now exceeds the demand for line side connections. Id. Attachment B, at 4. Such a statement suggests that ISPs are taking advantage of more efficient Internet access options.

For example, the Association of Pennsylvania Internet Service Providers cites numerous problems in obtaining LEC services,[28] such as Bell Atlantic's Internet Protocol Routing Service ("IPRS"), a technological alternative described in the Bell Atlantic/NYNEX Comments.[29] It explains that the service "is not a cost-effective solution for most independent ISPs," because its price is "extremely high" and "designed to recover extraordinarily high rates in the early years."[30] Furthermore, in order to use IPRS, an ISP must provide its customer lists and customer passwords to the LEC,[31] risking a serious CPNI problem. Moreover, the Association recounts that, when some of its members inquired about purchasing IPRS, they were told that it was "not designed for them and was not available to them."[32]

The "Data Access Gateway" service touted in PacTel's comments was initially offered to CIX member NETCOM at a whopping $80 per port per month, more than double the per port amortized cost of using network access points and leased business lines. Like IPRS, this service requires ISPs to give the ILEC its user names and customer passwords, thereby giving the ILEC the means to communicate by e-mail with all of these ISP customers and creating serious CPNI concerns. Furthermore, the service is technically incompatible with NETCOM's software protocol. The Digital Access Gateway product would have also required NETCOM to maintain

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28 See PA-ISP Comments at 5-6 (asserting anti-competitive ILEC behavior). See also CIX Comments at 7 (indicating that ISPs reported considerable problems with ILEC services including, installation delays, repair delays, and interruption of service); Comments of the Internet Access Coalition at 24 (noting that "[s]ervice use has been frustrated by the ILEC's complex service-ordering process") ("Internet Access Comments").

29 Bell Atlantic/NYNEX Comments at Attachment E.

30 See PA-ISP Comments at 5.

31 Id.

32 Id.

two separate sets of log-in strings for its customers -- one for California users in Pacific Bell's territory, another for all other customers. Finally, NETCOM would have had to order extra T1 lines, thereby incurring increased port and interconnection charges, because PacTel had designed the links to be on 1.544 megabit frame relay T1s, which fall far short of NETCOM's needs.[33]

Furthermore, the ILECs' slow record in deploying alternative access technologies counsels against relying upon access charges -- rather than pro-competitive regulation of the PSTN to encourage alternative access arrangements -- to promote higher bandwidth and more efficient access. The ILECs have been exceedingly slow to deploy ISDN, have priced the service in many states so that it has not been a viable alternative to analog dial-up services, and have in many instances provided deficient service. As the Internet Access Coalition explained in its comments, "it has taken more than 20 years for GTE and most of the BOCs to make switched ISDN available."[34] Computer users also note that the ILECs do little to promote or encourage the use of advanced Internet access technologies, such as ISDN.[35] Moreover, bypass technologies, such as xDSL, are not yet widely deployed.[36] There is, therefore, considerable reason to doubt assertions such as GTE's claim that it is "continuing the aggressive deployment of 'data friendly' technologies including Integrated Services Digital Network ("ISDN") and Asymetrical Digital Subscriber Line ("ADSL") technologies."[37]

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33 See Attachment A, NETCOM's Response to Surfing the "Second-Wave," Sustainable Internet Growth and Public Policy, a Pacific Telesis White Paper, at 2-3 (Apr. 23, 1997) ("NETCOM Response").

34 Internet Access Comments at 23.

35 See NetAction Comments at 11.

36 CIX Comments at 14. See also PacTel Comments at 37 (stating that xDSL access technology "is being developed".

37 GTE Comments at 5.

It simply does not make sense to reward the ILECs for such policies by making their competitors pay access charges. Nor is it sound policy to raise the cost of access to the PSTN in an effort to drive ISPs to make hasty purchases of ILEC offerings that are largely undeployed, overpriced, and incompatible with many ISPs' networks. Alternatives to ILEC data networks may provide more effective and less costly means of obtaining higher bandwidth and more efficient carriage of data traffic.[38]

C. Access Charges for Internet Service Would Stifle The Development Of The Internet Marketplace

The NOI makes clear that the Commission is "disinclined to take actions that would stifle, rather than enhance, the development of the Internet, or similar packet-switched networks." NOI at ¶ 315. Imposition of access charges would have precisely the result the Commission seeks to avoid.[39] The Internet access market is a highly competitive market with low margin profits.[40] As a result, independent ISPs who receive access over the PSTN would have to pass the costs of access charges through to their customers.[41] The costs of access charges, therefore, would ultimately fall squarely on consumers, especially residential, rural, and low income consumers who rely upon the PSTN for Internet access.[42]

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38 See p. 14 below & CIX Comments at 9-10; see also, e.g., Comments of GeoNet, Limited L.P., at 2 (accompanying Letter of Don Berteau, General Partner, GeoNet Limited L.P. to Hon. Reed E. Hundt (Apr. 18, 1997)).

39 See CIX Comments at 20-21; NetAction Comments at 6; Internet User Comments at 15.

40 See, e.g., Internet User Comments at 15; NetAction Comments at 6.

41 Id.

42 See CIX Comments at 20-21; Comments of NYSERNet at 2 (arguing that the imposition of access charges would make Internet access unaffordable for community service groups, low income households, small businesses, and consumers in remote areas).

Imposing access charges would further stifle development of the Internet by undermining competition in the Internet access marketplace. Such charges would empower ILECs who are in the process of entering this marketplace in force to raise rivals' costs, thereby driving independent ISPs out of the residential Internet access market.[43] The Internet user community, as represented by the Internet User Coalition, expresses concerns about the anti-competitive effects of access charges, noting that the parties best able to absorb the costs of access are the ISP affiliates owned by the ILECs themselves.[44] Indeed, ILEC-owned ISPs would receive a particularly strong competitive advantage over smaller, independent ISPs which, as the CIX's Internet Survey confirmed, typically have small revenues and serve residential customers.[45] The inevitable result would be an increase in prices, reduced connectivity, and reduced competitive offerings for residential and rural consumers -- a result clearly contrary to the goals of the NOI. NOI at ¶ 315.

III. Market Forces, Not Charges Paid By ISPs To ILECs, Hold The Greatest Promise For Yielding Higher Bandwidth

Market forces and FCC policies that promote, rather than curtail, competition in the Internet access market hold the greatest promise for avoiding potential "congestion concerns," "facilitat[ing] the development of the high bandwidth data networks of the future," and "enhanc[ing] the development of the Internet." NOI at ¶¶ 313, 311, 315. This approach is clearly consistent with the Telecommunications Act of 1996, in which Congress specifically found that the Internet is "rapidly developing" and has "flourished, to the benefit of all Americans, with a minimum of government regulation." 47 U.S.C. § 230(a)(1) & (4). As the

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43 See CIX Comments at 21; Internet User Comments at 15-16.

44 Internet User Comments at 15.

45 CIX Comments at 5 (ISPs with the smallest revenue base tend to serve residential customers).

NOI[46] and the CIX Internet Survey's data on the significant number of survey respondents who are small to medium-size businesses[47] both confirm, the Internet industry remains highly competitive -- in sharp contrast to the market for local telephone service.

ILEC proposals to impose access charges as a necessary incentive for deployment of higher bandwidth and for addressing alleged congestion ignore the central role of competition in the Internet access market in fulfilling the goals set forth in the NOI.[48] For example, some ILEC comments focus myopically on the different price of these services, suggesting that ISPs would never migrate to data networks unless the price of dial-up analog service were increased through imposition of access charges.[49] It is certainly true that the Internet access market is highly price sensitive, and that ISP consumers would balk at the inflated prices demanded by some ILECs for use of their incipient data networks. However, fierce competition in the Internet access market, with as many as 100 providers sometimes competing head-to-head in the same area code,[50] obliges Internet access providers to seek ways around localized congestion -- whether on their own networks or on the PSTN itself -- if they wish to retain customers.[51]

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46 Id. at ¶ 285 (over 2,000 ISPs offering Internet access as of mid-1996).

47 See CIX Comments at 4-5.

48 In this respect, the Internet market is fundamentally different from the monopoly local telecommunications market with which ILECs are familiar.

49 See, e.g., SWBT Comments at 3 (suggesting that ISPs' choice of "cheaper-price, flat-rated local exchange services permitted by the ESP exemption . . . . precludes the value and quality of services provisioned through new technologies"); Bell Atlantic/NYNEX Comments at 7 (claiming that the investment in network technology will be "wasted unless ISPs are given an economic incentive to use the new services").

50 Boardwatch Magazine Directory of Internet Service Providers at 264-66 (Fall, 1996).

51 See, e.g., CIX Comments at 9-10.

Similar market forces are driving ISPs to institute quality of service initiatives and to explore cost-effective higher bandwidth options for their customers. To name just a few examples, CIX members such as BBN Planet, PSINet and UUNET make extensive use of ISDN service. CIX member ATMNet is deploying an ATM backbone network on the West Coast. NETCOM has attempted to work with PacTel to deploy ADSL solutions to route traffic directly from ILEC end offices in high traffic areas.[52]

The advent of more widespread local telecommunications competition as a result of the 1996 Telecommunications Act promises to bring many more alternatives for ISPs seeking to increase bandwidth or to avoid potential congestion. Competitive access providers already carry ISP traffic in many of the areas in which local competition is present. As local competition grows and cable and wireless Internet delivery become much more widely available, there is every reason to expect ISPs to make more extensive use of the rapidly increasing array of alternative local networks.[53] Regulating in advance of this wave of competition would only risk creating market distortions and regulating to solve a prospective problem that the market will likely solve without regulation.

Indeed, ILECs' arguments that imposing access charges upon ISPs is necessary to relieve congestion and to promote higher bandwidth are based upon a regulatory paradigm fundamentally at odds with the 1996 Telecommunications Act. In the 1996 Act, Congress relied upon local competition to provide advanced services such as high bandwidth connections.[54]

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52 NETCOM Response, Attachment A, at 3.

53 See, e.g., Comments of WorldCom at 2-3 & Attachment C (discussing advent of new services to route Internet traffic around ILEC bottlenecks).

54 See S. Rep. No. 23, 104th Cong., 1st Sess., at 1 (stating that the purpose of the 1996 Telecommunications Act is "to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate repidly private sector depolyment of advanced telecommunications and information technologies and services . . . .").

With regard to the Internet, it established an explicit policy of "promot[ing] the continued development of the Internet and other interactive services," and "preserv[ing] the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation." 47 U.S.C. § 230(b)(1) & (2). In light of this explicit policy statement and the remarkably successful record of Internet innovation, it would be strange indeed to impose a regulatory charge on Internet service in order to achieve greater bandwidth and more efficient carriage of Internet traffic.

Where the Commission does have a constructive role to play is in regulating the *public switched telephone network*, consistent with the 1996 Act, to ensure that independent ISPs can bargain with ILECs on a more equal basis to achieve efficient alternative access arrangements. See NOI at ¶ 314. There is ample evidence in the record that ISPs are often unable to achieve solutions such as collocation rights equal to those afforded ILEC affiliates and access to unbundled network elements because ILECs are usually under little or no obligation to work with ISPs on these solutions even if they would bring significant network efficiencies.[55] Now that many ILECs are launching competing Internet affiliates, these ILECs have even less incentive to cooperate with competing ISPs on these solutions.

The Computer III Further Remand proceeding offers a promising opportunity for the Commission to update ONA and CEI to permit these pro-competitive arrangements. In this way, FCC "rules can most effectively create incentives for the deployment of services and facilities to allow more efficient transport of data traffic to and from end users," NOI at ¶ 313, consistent with the 1996 Act.

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55 See, e.g., CIX Comments at 9-10.

Accordingly, the Commission should reject ILEC requests to end or modify the ESP exemption, and should take up the question of more efficient access arrangements in the Computer III Further Remand proceeding.

IV. Conclusion

CIX is committed to working with the ILECs on alternative access arrangements and joint network planning to make more efficient use of the PSTN and to lay to rest fears of future problems due to Internet congestion on the PSTN. CIX likewise looks forward to participating in the Computer III Further Remand proceeding to explore how the Commission can best create an environment favorable to alternative access arrangements that afford more efficient carriage of Internet traffic, as well as continued dynamic competition in the Internet access market.

Respectfully submitted,

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NETCOM™

NETCOM response to *Surfing the Second Wave: Sustainable Internet Growth and Public Policy,*[1] a Pacific Telesis White Paper

Wednesday, April 23, 1997

NETCOM welcomes the opportunity to discuss alternative access methods with Pacific Telesis and the other Local Exchange Carriers.

The relationship of any Internet Service Provider with a Local Exchange Carrier is a complex one. NETCOM interacts with Pacific Telesis in a number of ways. NETCOM is a customer of Pacific Bell; we are an award-winning reseller of Pacific Telesis services; we belong to organizations where we work together on matters of common interest; and we are fierce competitors in the Internet Service market. These relationships give us a unique perspective on the Pacific Telesis White Paper and their latest efforts to tilt the Internet market in their favor.

NETCOM, too, supports the robust growth and availability of the Internet. We agree with Pacific Telesis that the Internet is a key part of the Global Information Infrastructure and essential to the economic vitality of the United States.

We also agree that the explosive growth in dial-up Internet traffic is creating enormous opportunities for Pacific Bell as well as for NETCOM. At an investor's conference in southern California in January, Pacific Bell has reported that they installed over 660,000 new telephone lines in 1996. "That's 82 percent higher than the average for the prior four years. Another example: the growth in additional lines was 88 percent higher in 1996."[2] The continued need for new Area Codes in California certainly demonstrate the community's desire for additional telephone service. In addition, Pacific Telesis officials have cited with pride that Pacific Bell Internet was "the most successful Internet access start up in California history"[3]. This too would have contributed to additional telephone system usage. [One way the service became successful so quickly was a Pacific Bell offer of 5 months of free Internet Service if you ordered a second telephone line. Clearly, Pacific Bell has been active in seeking additional Internet users.]

However, NETCOM strongly disagrees with both the conclusions and recommendations made in the Pacific Telesis white paper. NETCOM believes that it is not in the public interest to address local telephone network congestion issues with far-reaching regulatory policy. Such problems should be addressed by open market technology and collaborative solutions that benefit all our customers.

NETCOM has serious concerns with the limited scope of the Pacific Telesis study, the conclusions drawn from it and the application of public policy it espouses. Furthermore, NETCOM is gravely concerned that Pacific Bell, based on the relatively limited information on the usage patterns and knowledge of the user community, would suggest such an irresponsible application of public policy to an industry which is clearly emerging and so readily adaptable to the public

[1] Pacific Telesis Web Page -- http://www.pactel.com/about/pub_policy/esp/WP-internet-part1.html
[2] Pacific Telesis Web Page – Inside Line, Issue 98 http://www.pactel.com/financial/inside_line/il98.html
[3] Pacific Bell Press Release, September 19, 1996 – on their website.

switched telephone network (PSTN). Finally, NETCOM is disappointed with these conclusions because since the summer of 1996 each request that NETCOM has made for services and solutions that could immediately reduce the alleged congestion on the PSTN has been denied by Pacific Bell.

Their white paper ascribes network congestion solely to Internet usage. That assertion is not supported by either sampling or modeling of data. While clearly Internet usage does add to PSTN usage and probably congestion, it is not good science to ignore credit card authorization, health-benefit program transfers, facsimile transmissions or the growing popularity of pagers and cellular telephones.

Internet use is growing. This, too, is true. We're pleased by that. The value of connecting to the Internet grows as more and more people and businesses are connected. Clearing PSTN congestion by limiting either the connections or the connectivity does not reach our goal of access to and for everyone. According to a recent report by the Federal Communications Commission, the LECs report average holding times of between 16.7 minutes and 20.8 minutes per Internet connection.[4] These short sessions are a good use of switched telephone technology. However, a small percentage of users do stay connected longer than average. To provide higher quality and higher availability Internet access, NETCOM has committed to improving the quality of the on line experience by implementing our Fair Use policy in the United States. Fair Use reduces long sessions in congested access points.

NETCOM has also tried to offer services for those users who require longer sessions. Several of those attempts have been stymied by Pacific Bell.

- *Data Access Gateway Services.* During the summer of 1996, Pacific Bell requested a meeting with NETCOM to discuss the congestion on the network. It claimed that the growth of Internet traffic caused congestion on three parts of the access delivery to NETCOM and other ISPs. First, the remote Central Offices (CO) which collects calls from Internet users in a calling area; second, the interoffice trunking from the remote COs to the Santa Clara 11 CO which serves NETCOM; and third, the traffic into the Santa Clara 11 CO.

  As a suggested solution to the congestion, Pacific Bell offered digital Access Gateway Service (AGS). AGS collects Internet traffic at the distant Central Offices using either PRI-ISDN or Supertrunk (services which NETCOM also uses), sends the calls to a controller system, transports the calls through their Frame Relay network at a maximum bandwidth of 1.544 MBPS or T-1 (compared to ATM, SMDS or 45 MBPS or T-3 used by NETCOM). Pacific Bell initially offer this service at $80 a port/month compared to the current offering of Digital Entrance Facilities at $16 a port/month.

  At that price and lower service performance, NETCOM was unwilling to accept this product as the only solution to the congestion issue. In addition, it became apparent after several in depth discussions with Pacific Bell staff that this alternative was not technically compatible to NETCOM's offerings. First, NETCOM would have to require customers to alter user name and password log-in sequence and second, the controller chosen did not support CSLIP protocol which many NETCOM customers use.

[4] Werbach, Kevin, *Digital Tornado: The Internet and Telecommunications Policy,* Federal Communications Commission, OPP Working Paper Series, March 1997, Page 59.

NETCOM suggested an alternative solution to the congestion problem by offering to provide dial access service at the remote COs and provide its own modems and trunking back to a centralized site. To expedite the installation and reduce the immediate congestion on the PSTN, NETCOM requested colocation space from Pacific Bell in each of the COs. Again, this request was denied by Pacific Bell.

- *Call Collection Systems* from alternative providers. NETCOM has been testing Call Collection Systems from Competitive Access Providers (CAPs), companies such as Metropolitan Fiber Systems (MFS) and Electric Lightwave Inc. These services collect calls from remote COs, trunk traffic from these COs and deliver the traffic to one central point in the LATA at prices equal to or lower than current trunkside or PRI-ISDN Local Exchange Carrier offerings. In trying to use this service to move traffic off the PSTN, NETCOM has experienced delayed delivery of necessary interoffice trunking.

- *xDSL Family of Products.* NETCOM recognizes the value of HDSL and ADSL products as relatively low-cost, dedicated access for customers who want a permanent virtual connection to the internet. NETCOM requested from Pacific Bell both the unbundled copper and colocation space to provide connection to its customers. Pacific Bell refused both requests. It seems that while Pacific Bell wants the FCC and CPUC to believe that there is competition in the local loop as a basis for offering long distance service, their actions belie such statements.

The Pacific Telesis White Paper would appear to be a reply to the Federal Communications Commission requests for information about access charge reform. Access charges were imposed by the Commission at the time of the breakup of AT&T in the early 1980s. The charges were a temporary method to continue the subsidy from the long distance part of the telephone business to the local exchange part of the business. Since that time, the Local Exchange Carriers have sought to add functions subject to the charges rather than to prepare a market-based business model that did not depend on this revenue. The FCC ruled in 1983 that enhanced service providers were not subject to the charges. The reasons to continue that ruling still apply.
To summarize our positions 1) the public switched telephone network congestion is not proved to be exclusively caused by Internet and online service connections; 2) there is reason to think that applying access charges to Internet/online connections would significantly impair the development of our industry; 3) imposition of access charges would frustrate universal service goals; and 4) imposition of such charges on Internet/online connections would be anti-competitive. Finally, we point out that our consumers are paying access charges (Subscriber Line Charges – SLCs -- for their lines) and that many of them have installed additional lines to the profit of the Local Exchange Carriers..

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