The CIXtra Papers: The Telecommunications Act of 1996
and
Internet Service Providers (ISPs)

By

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former

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Dedicated to

Ronald Louis Plesser, the Master Lobbyist
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Table of Contents 3

Introduction 7

Report from Capitol Hill: The Telecommunications Act of 1995 (Vol. 1, Issue 1, April 1995) 10

Capitol Hill Report: ONA/CEI and Advanced Services (Vol. 1, Issue 2, May 1995) 11

Capitol Hill Report: (Vol. 1, Issue 3, June 1995) 12

Capitol Hill Report (Vol. 1, Issue 4, July/August 1995) 16

Capitol Hill Report: Reconciliation of Telecommunications Legislation Begins (Volume 1, Issue 5, September 1995) 18

Capitol Hill Update: Telecom and Copyrights Bills Get Attention (Vol. 1, Issue 7, Nov. 1995) 20

Capitol Hill Update: Bill Reconciliation Difficult (Vol. II, Issue 1, Dec./Jan. 1995) 21

Telecommunications Act of 1996 (Vol. II, Issue 2, Feb./March 1996) 22

US Legislative Update (Vol. II, Issue 3, April 1996) 26

Encryption Issues Affecting Digital Commerce Security (Vol. II, Issue 4, May/June 1996) 27

Regulatory Update: WIPO Addresses Digital Copyright (Vol. II, Issue 5, July 1996) 28

Capitol Hill Update: Encryption Issues Divide Industry, Administration (Vol. II, Issue 6, August 1996) 30

WIPO Attempts to Extend the Berne Convention Treaty (Vol. II, Issue 7, Oct. 1996) 31

The New 105th US Congress and the Internet (Vol. II, Issue 8, Dec. 1996) 32

Asian Pacific ISPs Gather in Hong Kong (Vol. 4, Issue 1, Jan./Feb. 1997) 35

WTO and Basic Telecom Services (Vol. 4, Issue 2, Apr./May 1997) 37

FCC: No Access Charges: Important Victory for ISPs (Vol. 4, Issue 3, June 1997) 39

CIX Criticizes CEI Plan From Southwestern Bell (Vol. 4, Issue 4, July 1997) 41

Interview: Ira Magaziner (Vol. 4, Issue 4, July 1997) 42

FCC: Changes and Challenges (Vol. 4, Issue 6, Oct. 1997) 44

The ITU Vision of the GII (Vol. 4, Issue 8, Dec. 1997) 46

FCC Update (Vol. 6, Issue 1) 47

FCC Update: A Review of New Proceedings (Vol. 6, Issue 2, March 1998) 48

Universal Service Success: CIX Leads Successful Regulatory Effort (Vol. 6, Issue 3, April 1998) 51

Competitive Safequards CIX Files Five Comments on Competitive Safeguards (Vol. 6, Issue 3, April 1998) 53

BOC Replies: CIX Responds to BOC Petition (Vol. 6, Issue 4, May/June 1998) 54

FCC Update (Vol. 6, Issue 7, Sept. 1998) 56

FCC Update (Vol. 6, Issue 8, 1998) 58

FCC Update (Vol. 6, Issue 9, 1998) 61

FCC Update (Vol. 7, Issue 10, Nov./Dec. 1999) 63

FCC Update (Vol. 8, Issue 1, Jan. 2000) 64

FCC Report: A Disappointing Decision (Vol. 8, Issue 2, Feb./March 2000) 66

FCC Report (Vol. 8, Issue 4, May 2000) 67

ICANN Update (Vol. 8, Issue 6, June/July 2000) 69

Exchanges, Competition and IPv6 in China (Vol. 8, Issue 6, June/July 2000) 71

CIX On The Northpoint Merger (Vol. 7, Issue 8, Sept./Oct. 2000) 72

FCC's Project Pronto Waiver Order (Vol. 8, Issue 8, Sept./Oct. 2000) 74

FCC Issues Notice of Inquiry on "Open Access" (Vol. 8, Issue 9, Nov. 2000) 75

FCC Report (Vol. 10, Issue 1, Jan. 2001) 76

How many Internet users in China (Vol. 10, Issue 1, Jan. 2001) 77

Multilingual Domain Names: A Case Study of Chinese
(Vol. 10, Issue 2, Feb. 2001) 78

INTRODUCTION

Between March 1995 and Jun3 2000, I was the International Policy Editor for CIXtra, the newsletter of the Commercial Internet eXchange (CIX). These columns are my attempt to explain CIX's lobbying activities to its members which included Internet Service Providers (ISPs) from primarily, the US but also from Asia and Europe. CIX was founded in 1992 by ISPs to provide a router (known as the CIX router) to provide a bypass around the NSF net so that commercial traffic (non-acceptable use) traffic could be transmitted on the Internet. After 3 contentious years, in 1995 the members decided to become a trade association to advocate on behalf of Internet Service Providers.

In March of 1995, Susan Fitzgerald, President of CIX (who I had worked with at the Riverbend Group in the mid-eighties) asked me to write a column for the newsletter (CIXtra) of the trade association. She asked her fellow contractor at Sprint, Barbara Dooley, to be the editor.

I had spent 15 years in one way or another working for the US Congress and the Federal Government and welcomed the opportunity to try to make sense of how the government was responding to the incredible growth of the Internet and the Internet Service Provider Industry.

In 1981, while a religion major at Williams College in Williamstown, Massachusetts, I spent a summer on the Hill as an intern for Congressman Walter E. Fauntroy (D-DC). When I graduated, I came back as a Legislative and Press Secretary for the Congressman. This was the year the IBM PC was released. Though I enjoyed answering correspondence, writing legislation, and handling the press, I was most excited about Congressman Fauntroy's vision of running a distributed computer network out of his Congressional Office that could rival the multi-million dollar computer system that Richard Viguerie had used to finance President Ronald Reagan's election committee.

Congressman Fauntroy, as chairman of the Congressional Black Caucus, took the lead in driving the Black Caucus alternative Federal Budget and passage of the Martin Luther King holiday bill. Under incredible pressure from their Black and progressive White constituents, the US Congress leadership decided to have the House of Representatives vote in favor of the Bill to Make the third Monday in January a holiday and then to have the Senate amend the bill by moving the holiday to a Sunday. What they had not expected was Congressman Fauntroy's ability to mobilize the Black and progressive community on a moments notice. Numerous Senator's agreed to sponsor the amendment, but quickly dropped it as Congressman Fauntroy using his computer system that I managed for him mobilized Black and progressive constituents in their States. The Martin Luther King Holiday became law. We used the same strategy to pass the South African Boycott Legislation, that is credited with being a major spur for change in South Africa.

Though I loved the press and the legislative process, I was inflamed with a vision for the use of PC networks to change the world. I then went on to be Communications Director for Congressman Jim Moody who tasked me with building a database and mailing strategy to pave the way for his run for the US Senate. I then went on to sell and design Novell networks for the

US Congress, the White House and over 20 Federal Agencies as part of Ed Groark's Riverbend Group. These computer networks became the basis for the Federal Internet. I then worked for General Electric as a global network sales engineer support GEIS's Federal sales effort. I then went to Falcon Microsystems, the Apple value added reseller to the Federal Government. By the time I joined CIX, I certainly new my way around Washington, DC.

As I made my way around Congress for CIX in the Spring of 2005, I was aghast that I could find no one who could tell me what the implication of the proposed amendment to the Telecommunication Act of 1934 meant for the Internet and Internet Service Providers (ISPs). For the past ten years there had been a major legislative effort to bring the Telecommunications Act up to date after the break up by Judge Greene 1983 of ATT. Every Congress the amendment broke down under intense fighting between the Bell companies and the newspapers, both of whom wanted to control what was seen as the lucrative value added information services that computer networks enabled. Things were further complicated by the incredible success that MCI and Sprint in the long distance telephone market against AT&T.

The whole Congressional debate focused on how to make sure that the Bell companies did not use their legacy monopoly position to "unfairly" dominate the computer network based information industry. Drafts of the Telecommunications Act were focused on defining the difference between information service providers and telecommunications providers in such a way that prevented this abuse of monopoly power due to the Bell's installed base of copper in the local loop (the wire that connects homes and businesses to the phone system).

I asked Congressman, Senators, and their staffs whether the Internet was a telecommunications service or an information service as defined by the Act. No one had any idea what I was talking about. The only person that did was Vermont Senator Patrick Leahy. He responded to my question at a CIX event, by saying that he had just yesterday been repeatedly asked on the Senate floor a similar question and he had no idea of the answer.

The Telecommunications Act of 1996 passed without resolving the issue. This lack of resolution created immense problems for the Federal Communications Commission (FCC), the US Courts, and the State Telecommunications Commissions. This book represents the series of columns that I wrote for CIX as the US government struggled with how to deal with the Internet.

I worked very closely with CIX counsel Piper Marbury, particularly Piper Marbury senior lobbyist Ronald Plesser to whom this book is dedicated. Ron and I had a fundamental disagreement. Value added telecommunication resellers had been exempted from the FCC from having to pay the long distance tariffs that were collected to fund the Universal Services Fund that was used to help fund the deployment of copper to rural areas. Plesser believed that ISPs needed to protect this exemption at any cost. I disagreed and believed ISPs were telecommunications providers and needed to have access to components of the Bells companies' infrastructure in order to compete with them. I thought this was essential for the survival of the ISP industry even if this meant that ISPs had to pay access tariffs. I think the decimation of the ISP industry in the face of broadband Internet, proves that I was right; however, at the time I let go of my opinion and followed Plesser's lead.

In my CIXtra columns, I also dealt with international issues particularly the “domain name” wars over who would control this “scarce” resource. Back in the late 1990’s there was almost mass hysteria over the Internet and businesses scrambled to preserve their piece of the pie. They saw their survival as dependent on being able to find a way of “controlling” something that was designed to be “uncontrollable”. Who got to give out Domain names, such as www.McDonalds.com became a major point of contention in the industry and resulted in major conflict between CIX and the Internet Society and the United Nations International Telecommunications Agency. This conflict, after much contention, resulted in the formation of the Internet Corporation for Assigned Names and Numbers (ICANN).

Another major concern for ISPs was liability for copyright infringement by their users. CIX was very concerned that copyright holders would drive the passage of legislation that would force ISPs to monitor their users and open them up to massive liability. I followed this issue both in the US Congress and also at the World Intellectual Property Organization (WIPO). Another related issue was how to protect children who are on the Internet while protecting “freedom of speech” and making sure not to hobble the Internet and the ISP industry.

I must say that working with Susan Fitzgerald, Bob Collett (CIX Chairman of the Board), Barbara Dooley (CIX President), Mark McFadden (CIXtra standards editor), Eric Lee (CIX counsel) and Ron Plesser (CIX counsel) and his colleagues at Piper Marburry, Jim Halpert, Vince Palendini and Mark O’Conner was one of the most intellectually exciting things I have ever done. I now currently teach in the Science, Technology and Society program at Arizona State University where I try to get my students to think about how the Internet is transforming our society and how the government can best ensure that the Internet provides the maximum benefit to us all.

I would like to thank my Administrative Assistant, Jacy Smith, for her help in preparing this book and to my Chairman at ASU, Dr. Nicholas Alozie, for supporting the effort.

Report from Capitol Hill

The Telecommunications Act of 1995

Telecommunications deregulation plans are moving on the fast road through the Senate but there are some bumps in sight. Senator Larry Pressler (R-SD), Chairman of the US Senate Committee on Commerce, Science and Transportation has introduced legislation to remove the barriers to competition between the Bell companies, long distance carriers, and the cable industry.

According to CIX's legal counsel, Ron Plesser, this legislation, if enacted, would encourage enhanced services competition while opening up competition in local loop access that should benefit Internet Exchange Carriers.

The Committee mark-up session led to a 17-2 vote to send the bill to the full Senate.

The bill provides strict guidelines on how interconnection requirements are to be negotiated between the dominant local interexchange carriers and competitors who need access to some part of the network. Each state is given primary responsibility for ensuring that fair interconnection agreements are negotiated, and is given the right to impose a settlement if negotiations fail. The bill stipulates that pricing for network access should be "unbundled, non-discriminatory, and individually priced to the smallest element that is technically and economically reasonable to provide."

The bipartisan bill mandates that Bell companies create a separate subsidiary to offer inter-transport or information service. (Information services that the Bells could offer before 1991 are exempted.) There are strict rules for separating the subsidiaries. Further, any service or benefit the telephone operating companies offer a subsidiary must be offered to any service provider who requests it. CIX Counsel Plesser views these "structural separation" requirements as a welcome protection for Internet Service Providers.

The intent of the bill, according to a Committee source, is to use "competition, not regulation" to ensure open access to new local services such as broadband networks to the home. Senator Pressler believes it is counterproductive to try and write regulations governing emerging telecommunications technologies and the legislation would provide a framework to deal with specific instances where a monopoly is limiting competition.

Before the bill left the Committee, Senator Slade Gordon (R-WA) introduced an amendment to incorporate Senator Jim Exon's (R- NE) Communications Decency Act (S. 314). This amendment restricts the use of telecommunications facilities for obscene or harassing communications. The Electronic Frontier Foundation (EFF), the Center for Democracy and Technology (CDT) and other organizations have raised concerns that S. 314 could impose criminal liability on anyone who makes available obscene material electronically. In spite of lobbying efforts, including a petition circulated on the Internet opposing restrictions on free speech in the telecommunications deregulation bill, the amendment was incorporated by unanimous voice vote and without significant committee debate. In response to pressure from the telecommunications industry, the amendment was modified to exclude telecommunications carriers and on-line service providers from liability. Only those who "knowingly" create communication which is "obscene, lewd, lascivious, filthy, or indecent" are subject to prosecution under this proposed law.

The legislation now goes to the Senate floor.

In the House of Representatives competing interests have held up the introduction of telecommunications reform. However, a pro-competition bill is expected shortly from Rep. Jack Fields (R-TX), Chairman of the Telecommunications Subcommittee. ■

Will Foster covers Capitol Hill for CIXtra.

Capitol Hill Report

ONA/CEI and Enhanced Services

The CIX March 30, 1995 White Paper, "A Telecommunications Policy Framework for Internet Service Providers," proposes that FCC and Congressional regulation support the application of the CEI regime to Internet–related services offered by the BOCs and all local common carriers.

According to CIX President, Robert Collet, "the CIX membership believes that the ONA/CEI (Open Network Architecture/Comparably Efficient Interconnection) regime should be rigorously applied to new enhanced services such as Internet and Video Dial–Tone Service. The goal is to assure a level playing field between the BOCs and the ISPs who are enhanced service providers (ESPs, i.e., non-facilities based)."

The Senate Telecommunications Competition and Deregulation Act of 1995, S.652, awaiting consideration on the Senate floor, does not mention the ONA/CEI regime. Instead it seeks to address the problem of letting competitors into local "telephone" service and the Bells into long distance "telephone" service through a combination of structural separation, interconnection, and unbundling requirements. Senate Bill S. 652 allows the BOCs to enter the interLATA market through a separate subsidiary once certain interconnection and unbundling requirements are met. It details how these interconnection requirements are to be negotiated. The bill embodies elements of both "structural separation" and the ONA/CEI regime. However, an assistant to Senator Ernest Hollings (D–SC) told *CIXtra* that though the ONA/CEI regime is never mentioned, the intent of the bill is to leave the FCC's ONA/CEI regime "pretty much in place."

As reported last month, S. 652 requires that the Bell companies offer interLATA telecommunication services through a separate subsidiary. The bill does exempt the BOCs from the separate subsidiary requirement for information services that they were authorized to provide before July 24, 1991.

The Alliance for Competitive Communications, the lobbying group for the BOCs, told *CIXtra* that they interpret this section to mean that the Telephone Operating Company will be able to offer TCP/IP services. They argue that no separate subsidiary would be required because "protocol conversion" services were allowed prior to the July 1991 ruling.

The BOCs would have a lot to gain if they could start introducing Internet services without having to wait to meet all the requirements associated with offering interLATA service. S. 652 does not clarify whether Internet services would be considered interLATA services.

CIX legal counsel Ron Plesser believes the question is more complex. He points out that before the July 1991 ruling, BOCs were restricted from providing gateway services that would impact the user interface. Plesser questions whether Internet services such as World Wide Web servers and browsers that shape and define the user interface would pass the "pre–1991" test. Telephone companies might be able to offer TCP/IP services but would have to offer World Wide Web browsers through a separate subsidiary.

A Senate Commerce Committee staffer confirmed that there has been very little discussion about when and how the Bell companies can offer Internet services. He did point to an exemption in the Senate bill that allows BOCs to provide incidental interLATA services such as providing a service that permits customers to retrieve their data in another LATA. Whether this provision could be applied to certain Internet services remains to be seen.

> *The goal is to assure a level playing field between the BOCs and the ISPs who are enhanced service providers (ESPs, i.e., non-facilities based).*
>
> ***Bob Collet, CIX President***

Meanwhile, the House Commerce Committee has been actively writing telecommunications deregulation legislation to be introduced in May. A Committee staffer confirmed that the House Bill will address the ONA/CEI regime but was unwilling to provide any further details about the House bill.

In addition, the FCC Docket 95-20 proceeding is reexamining whether "some form of structural separation requirements" should be reimposed on BOC provision of enhanced services. CIX responded to the docket by recomending mainentance of ONA/CEI for keeping the local loop open. *(See FCC Report, p. 6)*

Update: In response to "The Communications Decency Act of 1995" (the Exon amendment) which was incorporated in S. 652, Senator Patrick Leahey (D–VT) has introduced S. 714 to create a national commission to study the best methods to ensure civility on the Internet. A Leahey staffer told *CIXtra* that Senator Leahey proposes to substitute his bill for the Communications Decency portion of S. 652 when it comes up on the Senate floor for a vote. ■

Will Foster covers Capitol Hill for CIXtra.

CIXTRA

Volume I, Issue 3, June 1995

Capitol Hill Report

The Communications Act of 1995

The House Commerce Committee has reported out H.R. 1555, its version of the communications reform effort. Although the issues addressed, e.g., interconnections and structural separation, are similar in intent to the Senate Bill S. 652, the requirements are somewhat different. *CIXtra* reporter Will Foster is closely following both bills. This month we compared the two bills and talk to insiders about what it all means.

Capitol Hill Report

On May 25th the House Commerce Committee, chaired by Congressman Thomas Bliley (R-VA) reported out H.R. 1555, The Communications Act of 1995.

Telecommunications reform legislation is now moving through the House as well as the Senate. H. R. 1555 is very similar in intent to the Senate Bill S. 652 that is awaiting consideration by the full Senate, but there are important technical differences between the bills. Each bill defines BOC "interconnection" and "structural separation" requirements somewhat differently. How these differences are reconciled in the final legislation will impact how the BOCs offer Internet services and invest in broadband services.

Interconnections

The House bill is very specific that local exchange carriers shall provide access to any other carrier or person offering telecommunication services or information services. The Senate bill specifies interconnection requirements for "telecommunication" services but not for "information services". Since "Internet services" are a combination of "telecommunication" and "information" services, CIX members would have more interconnection options under the House bill. In addition, while the House bill requires "all" local exchange carriers to provide interconnections, the Senate Bill only requires local exchange services with "market power as determined by the FCC" to do so. Neither bill clearly specifies whether interconnection requirements will apply to the new broadband (coax-fiber and switched fiber) networks that are being deployed.

The House bill does specify in Sec. 241 that the duty of a common carrier is to interconnect with other providers of telecommunications and information services. The Senate bill only applies interconnection requirements to local exchange carriers which it narrowly defines as "a provider of telephone exchange service or exchange access service. " The Alliance for Competitive Communications, the lobbying arm for the BOCs, told CIXtra that the BOCs new broadband networks will not have interconnection requirements as long as the existing wire landline networks are left in place.

Structural Separation

Sec. 272 of the House bill lays out very specific structural separation requirements for Bell subsidiaries which want to engage in "electronic publishing." The affiliate and the BOC cannot

Issues	House Bill H.R. 1555	Senate Bill S.652	CIX Concerns
Interconnections	Requires LECs to interconnect with any other carrier or person offering telecom services or information services	Requires LECs with "market power" as determined by the FCC to connect with other telecommunications carriers	Will ISPs have a right to interconnect?
Structural Separation	BOCs and "electronic publishing" subsidiaries must separate business entities - no employees, marketing or billing in common. (Does not apply if BOC partners with a separate firm)	One set of structural separation requirements applies to manufacturing, information services and interLATA services. No electronic publishing distinction.	Will BOCs have an unfair advantage in selling internet and www services?
Interoperability Mandate	Removed from House Bill	Might be added to Senate Bill - Discussion Legislation is circulating	Is there an appropriate role for government in setting hardware and software standards?
Extension of Universal Access to New Networks	Amendment withdrawn at committee but may reappear on House floor	Provides framework for extending universal service to all telecom carriers. Leaves details to FCC.	Does universl service include broadband services?
Obscenity	No provisions Author of "Decency" Bill, H.R. 1004 cautions House to move slowly.	Communications Decency Act of 1995 (Exon Amendment)	How will obscenity amendments affect ISP business?
Complaint Procedures for Violations of the Communications Act of 1934	Requires FCC to establish procedures for processing Small Business complaints		Does this provision help maintain a "level playing field?"
Telemedicine	Amendment withdrawn. May be reintroduced on the floor	No provisions	Will interstate restrictions be lifted?

have employees or property in common and are not permitted to perform joint marketing or billing. The Senate bill, in contrast, does not have a specific "electronic publishing" requirement. Instead, it lays out one set of structural separation requirements that are to be applied to manufacturing, information services, and interLATA services. Under the House version the "separate subsidiary" requirements for electronic publishing applies only when that publishing occurs over "basic telephone service." BOCs are free from "structural separation" requirements if they publish electronically or provide video content over new broadband networks that they install as long as the existing wire "basic telephone service" remains in parallel.

According to Robert Stewart, spokesman for Pacific Telesis, there has been endless debate by lawyers as to whether or not the Bells would be required by this legislation to provide Internet services through a separate subsidiary. In the face of this indeterminacy, Pacific Telesis this month announced the formation of a separate subsidiary to provide Internet services. Though PacTel would like to make its Internet subsidiary an integral part of its marketing and sales efforts and take advantage of existing plant and equipment, it realizes that it will have to adjust to new FCC regulations and telecommunications reform legislation if and when it passes.

The House bill has an exemption that certain CIX members might find useful if it becomes law. This provision allows the BOCs to partner with another firm to create an electronic publishing joint venture that would be exempt from "structural separation" requirements and can utilize marketing and other resources of the Bell Operating Company. This bill could create real incentives for the BOCs to partner with firms with electronic publishing capabilities and expertise.

Interoperability

Congressman Ed Markey (D-MA), the former chairman of the House Telecommunications Subcommittee has been a vocal advocate of giving the FCC a role in encouraging "interoperability" on the National Information Infrastructure. The software industry, led by the Business Software Alliance, is resisting any attempt that might force companies to share key components of their hardware technologies with their competitors for free, or for non-marketplace determined licensing fees. Congressman Rick White (R-WA), whose district includes Microsoft's Redmond headquarters, succeeded in removing the "interoperability" provisions from H.R. 1555. The Senate Bill S. 652 currently requires interconnectivity but not "interoperability." SenatorBob Kerrey (D-NE) is currently circulating discussion legislation that could add interoperability requirements to the bill..

Universal Access

There has been considerable debate in the House as to what constitutes "universal service" and whether new broadband services should be available to all Americans. During the Committee mark-up an amendment to extend universal service was withdrawn, though a Committee staffer noted that such an amendment could still come up on the House floor. The Senate bill does provide a framework for extending universal service to all telecommunications carriers, but leaves many of the implementation details up to the FCC and a federal-state joint board.

Obscenity Provisions

H.R. 1555, unlike the bill in the Senate, does not contain provisions to prevent obscenity and harassment on the Net. In fact, Rep. Tim Johnson, the author of the House "Decency" Bill H.R. 1004, is now recommending that the House move slowly in placing restrictions on electronic communication.

Senate Bill S. 652 Amendments

According to a staffer to Senator Bob Dole (R-KS), the Republican leadership is developing a set of amendments to the bill that will require the FCC to periodically cost-justify all regulations. All regulations and regulatory procedures that cannot be cost-justified in this

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Other Federal Initiatives

The Clinton-Gore Administration has extended its promotion efforts from the National Information Infrastructure (NII) to the **Global Information Infrastructure (GII)**. In the Global Information Infrastructure: Agenda for Cooperation (http://iitf.doc.gov.70/papers/documents/giiagend.html) published earlier this year, the Administration lays out a strategy fo working within a wide range of international bodies including the ITU, G7, GATT, and the Interamerican Telecommunications Commission (CITEL) to facilitate national "legal and regulatory environments that supports efficient investment and innovation and promotes full and fair competition."

The U.S. Agency for International Development (USAID) is exploring how **the Internet can enable trade and economic development**. USAID has set up a list server for discussion of existing and planned public and private sector initiatives in electronic commerce, international trade, and economic development. (To subscribe send email to LISTPROC@INFO.USAID.GOV with "subscribe E-TRADE Your Name" in the body of the message.)

There is also a major effort to **utilize the Internet to respond to emerging pathogens/diseases**. Seventeen US agencies in conjuction with the World Health Organization are working together to develop a coordinated strategy to deal with emerging pathogens/diseases. On June 1, there will be a public discussion at State Department on the draft report

There are growing concerns at AID and the World Bank on how to support the expansion of the Internet particularly in Africa. AID has announced the **Leland Initiative** to provide funds and resources for expanding Internet connectivity in Africa.

Continued from page

process would be abolished. These "leadership" amendments represent a compromise with those Republicans, including Senator Bob Packwood (R-OR) and Senator John McCain (R-AZ), who have been vocal advocates for abolishing all FCC regulations in favor of market mechanisms. Senators Packwood and McCain voted against S. 652 in the Commerce Committee because the bill, in the words of their Minority report, "mandates 87 new regulatory proceedings while the bill contains no guaranteed end to regulation."

Nick Allard, who works on legislative matters for the law firm of Latham & Watkins, predicts that amendments and S. 652 will be rolled into a Majority Leader's bill that will be brought to the Senate Floor for a vote. Senator Larry Pressler (R-SD), the Commerce Committee Chairman, and Senator Ernest Hollings (D- SC) are working together to "strongly discourage" floor amendments that might give breaks to certain special interests. Allard also predicts that the House Communications Act of 1995 will come to the House floor under a rule that would prohibit amendments, and it will pass.

Telemedicine Provisions

The telemedicine amendment to H.R. 1555 proposed by Rep. Ron Wyden (D-OR) was withdrawn. The amendment would have allowed a physician in one state to consult with a licensed health care practioner in another state using any advanced telecommunications services. The amendment was supported by the American Telemedical Association and opposed by the American Medical Association because it did not restrict telemedical services to consultations between licensed physicians. It is possible that a telemedicine amendment could still be introduced on the House floor.

Small Business Complaint Procedure

Title VI, "Small Business Complaint Procedure," was added as an amendment to H.R. 1555. It would require the FCC to establish procedures to receive and review complaints by small business regarding violations of the Communications Act of 1934. Under this provision, the FCC will have to order the common carrier to cease engaging in violations within 60 days of the complaint by the small business.

Though there are significant technical differences in the House and Senate bills, most observers believe that the resulting conference committee could fashion a bill that both the House and Senate will agree to and the President will sign. In a year of major budget cutting, telecommunications reform may be the only positive thing Congress will be able to take credit for that can create significant economic growth and jobs. ■

Will Foster covers Capitol Hill for CIXtra.

Capitol Hill Report

On June 15, 1995 the congressional effort to deregulate telecommunications moved forward with the passage in the Senate of S. 652 by a vote of 81 to 18. Paradoxically, this legislation may create a whole new regime of regulations and court challenges because of the Exon/Coats amendment, which attempts to make the Internet safe for children.

As the focus moves to the House, conservative Republican legislators are wrestling with how to enforce "family values" without creating a regulatory arena that stifles free enterprise and speech.

Senator Jim Exon (D-NE) originally introduced his bill, the Communications Decency Act of 1995, to extend the laws restricting the use of telephones to all telecommunications devices. The original bill extended criminal liability to anyone who "makes or makes available" obscene material. Before attaching his bill as an amendment to the Committee bill, Senator Exon responded to the concerns of the electronic messaging community by adding a provision that exempted those from liability who only provide "access... and related capabilities" but who do not create the obscene content that is accessed.

The Exon amendment was immediately attacked by a broad coalition of organizations who feared government attempts to censure content on the Internet would result in a serious erosion of first amendment rights. The Electronic Frontier Foundation (EFF) and the Coalition for Technology and Democracy (CTD) worked with Senator Patrick Leahy (D-VT) to fashion an alternative which would empower a commission to study the problem and to work with industry to develop a solution. However, when Senator Leahy offered his amendment on the Senate floor as an alternative, Senator Exon used a procedural maneuver to have the Senate vote on replacing Senator Leahy's amendment with new language developed by Senator Exon and Senator Dan Coats (R-IN). The Exon/Coats amendment, as passed by a vote of 84-14, imposes fines of up to $100,000 and imprisonment of up to two years for initiating or making available "any comment, request, suggestion, proposal, image, or other communication which is obscene, lewd, lascivious filthy, or indecent."

The new Exon/Coats amendment is more restrictive than the earlier version. It was rewritten in an attempt to address the complexities of the Internet and to deal with the international nature of telecommunications. The bill, for instance, makes it illegal to offer obscene materials to US consumers electronically from other countries. In addition, Senator Coats convinced Senator Exon to rewrite the Section (F)(1) defense to tighten the conditions under which access providers could avoid liability:

> No person shall be held to have violated subsections (a), (d) or (e) solely for providing access or connection to or from a facility, system, or network over which that person has no control, including related capabilities which are incidental to providing access or connection.

The CDT argues in its excellent analysis of the bill [http://www.cdt.org/policy/freespeech/exon-coats analysis.html] that this language is poorly worded to deal with the complexities and interdependence of the Internet. The FCC will have to promulgate new regulations to explain whether and under what circumstances an ISP has "no control" over the Web sites, Usenet feeds, and/or e-mail that its clients access or make available.

Exon/Coats' also provides a defense for access providers who try and control content to comply with the bill:

> (3) It is a defense to prosecution under subsection (a), (d)(2), or (e) that a person has taken reasonable effect and appropriate actions in good faith to restrict or prevent the transmission of, or access to a communication specified in such subsections, or complied with procedures at the Commission (FCC) may prescribe in furtherance of this section.

Critics have pointed out that the "no control" defense and the "attempt to regulate" defense will create a dilemma for ISP and other service providers. If ISPs implement technologies to regulate what minors access on the net, they run the risk of not being able to use the "no control" defense.

In the House of Representatives, conservative Congressman Christopher Cox (R-California) has joined with liberal Congressmen Ron Wyden (D-Oregon) to warn that if the Exon/Coats amendment becomes law, it will discourage access providers from making any attempt to control the content of what they are making available. They also point with alarm to the recent New York Supreme Court ruling that Prodigy's decision to voluntarily invest in obscenity screening software and to take other steps to keep indecency off its service "opened it up to greater liability." Because Prodigy sought to be a "family-oriented" computer network, the Court said, it was exercising "editorial control." This left the company fair game for a $200 million lawsuit by an investment bank allegedly libeled on one of the financial bulletin boards.

In response, Congressmen Cox and Wyden have introduced H.R. 1978, the Internet Freedom and Family Act, and are trying to build momentum behind their bill as an alternative to the Exon/Coats language. Cox-Wyden ensures that service providers who take steps to clean up the Internet are not subject to additional liability for being "good samaritans."

The bill prevents the FCC from regulating content over the Internet. It also fosters industry cooperation and innovation in developing new ways to improve user control over the informa-

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tion received by children and parents. Congressman Cox and Wyden point to the efforts of the Interactive Working Group and the Information Technology Association of America (ITAA) to bring blocking and filtering techniques rapidly to the marketplace.

Currently, the Telecommunications Bill in the House, H.R. 1555, does not try and regulate "obscenity" on the Internet. In fact, H.R. 1555 recommends that a commission work with industry to study the question. However, Congressmen John Duncan (R-TN) and Bunning (R-KY) have been asked to offer the Exon/Coats language as an amendment when the bill comes to the House floor during the last week in July.

A staffer to Congressmen Duncan told *CIXtra* that the two Congressmen have developed concerns as to whether the wording of Exon/Coats will accomplish its objectives. They have been meeting with Congressmen Cox to improve the language and to develop a compromise amendment. A spokesman for Congressman Cox confirmed that negotiations are in progress but that no final agreement has been reached.

Speaker of the House Newt Gingrich (R-GA) has already publicly condemned the Exon/Coats amendment as ill-conceived and a "clear violation of free speech and ... a violation of the right of adults to communicate with each other." Though *CIXtra* has learned that the Speaker plans to bring the Communications Act to the floor under a rule that will severely restrict amendments, it is no clear whether the Speaker will try and prevent Congressmen Duncan and Bunning from offering their amendment to enforce "family values" on the Interne

The telecommunications deregulatior bill is moving towards passage in part because the Republican-dominated Congress is highly skeptical of government regulation. As the complexity of regulating the Internet becomes apparent many Congressmen appear to be torn between the need to appease their "famil values" constituencies, and their fears of creating a bureaucracy that threatens free enterprise and free speech. ■

Will Foster covers Capitol Hill for CIXtra.

Internet resources on US telecommunications reform legislation: Full text of legeslation : http://thomas.loc./gov/home/c104query.html...Communications Decency Act FAQ can be found at http://www.panix.com/vtw/exon... A growing list of telecommunications reform legislation-related web sites, with links, is available at http://www.mtn.org/mco...Other web sites: http://www.eff.org/pub/Alerts/...http://www.cdt.org/cda.html...FTP Archives: ftp://ftp.cdt.org/pub.cdt/policy/freespeech/00-INDEX.FREESPEECH...ftp://ftp.eff.org/pub/Alerts/

Capitol Hill Report

Reconciliation of Telecommunications Legislation Begins

Though many members of Congress have pointed to the Internet as the harbinger of the National Information Infrastructure, neither the House nor Senate telecommunications bills were written with the infrastructure of the Internet in mind.

As Congress get back to work after the August recess, the Conference Committee for the Telecommunications Bill will start work on reconciling the House and Senate versions of the proposed legislation. The job of this small, joint Committee is to combine S. 652 and H.R. 1555 into one bill that the House, Senate, and the President will agree on and that President Clinton will sign.

The Internet Service Provider industy is closely following this legislation because the exact language of the Conference Committee bill will impact when and how the Bell companies can offer Internet services, and how much they can charge Internet Service Providers (ISPs) for interconnections and unbundled network components.

ISPs are also watching closely how the Committee reconciles the Exon/Coats approach to the regulation of obscenity and indecency on the Internet with the Cox-Wyden billís prohibition on FCC regulation of content.

It is not even clear where ISPs fit in each bill's critical distinction between "telecommunication services" and "information services."

Staffers have already begun to meet to identify problem areas and to develop compromise language. Certain lobbying organizations, such as the Bells' Alliance for Competitive Communications, have helped to write many portions of both bills and will continue to play an active role in the process.

A coalition of long-distance carriers will attempt to counteract the influence of the Bells on the final legislation. The coalition may find it difficult to recover from the defeat it suffered in August when it tried to stop the Manager's amendment in the House.

CIX has been actively working with the Clinton Administration and key staff persons in Congress to evaluate each bill in terms of its impact on the Internet and Internet Service Providers.

Since S. 652 requires telecommunication carriers to contribute to the Universal Service Fund, most ISPs will want to avoid any interpretation of their status that would force them to pay into the Fund.

In fact, the Senate Conference Committee Report makes clear that the bill does not require providers of information services to contribute to universal service. "Information service providers" do not "provide" telecommunications services; they are users of telecommunications services.

The definition of telecommunications service specifically excludes the offering of information services (as opposed to the transmission of such services for a fee) precisely to avoid imposing common carrier obligations on information service providers.

The House bill H.R. 1555 requires LECs to provide both telecommunications services and information services with access to interconnections and unbundled network components on "just and reasonable" terms.

The Senate bill S. 652 specifies that LECs must "enter into good faith negotiations with any telecommunication carrier requesting interconnection or network functions on an unbundled basis...at rates that are reasonable and nondiscriminatory." The Senate bill does not give "information services" this right.

CIX will watch how the Conference Committee resolves the disparities between the House and Senate bills over LEC interconnections and unbundling of network components. The exact language that is chosen will determine whether ISPs have access to LEC components for both plain old telephone service (POTs) and emerging broadband networks.

With other legislation competing for the attention of House Commerce Committee Chairman Bliley's (R-VA) attention, one staffer predicted that the telecommunications Conference Committee bill would not reach the Presidentís desk until late October or November.

Though both the House and Senate bills attempt to move the telecommunications industry from regulation to competition, the reconciliation of the significant differences in the ìtransition rulesî will affect the level-playing field sought by ISPs.■

Will Foster covers Capitol Hill for CIXtra.

Are you a telecommunications service or an information service?

According to US Senate bill S. 652 ...

Information service is the offering of services that
(1) employ computer processing applications that act on the format, content, code, protocol, or similar aspects of the subscriber's transmitted information;
(2) provide the subscriber additional, different, or restructured information; or
(3) involve subscriber interaction with stored information. (pp. 13-14)

Telecommunications is the transmission, between or among points specified by the user, of information of the user's choosing, including voice, data, image, graphics, and video, without change in the form or content of the information, as sent and received, with or without benefit of any closed transmission medium.

Telecommunications service means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used to transmit the telecommunications service.

Telecommunications carrier means any provider of telecommunication services, except that such term does not include hotels, motels, hospitals, and other aggregators of telecommunications services. A telecommunications carrier shall only be treated as a common carrier under this Act to the extent that is engaged in public services for voice, data, image, graphics, or video that it does not own, control, or select...(pp.12-13)

Issues	House Bill H.R. 1555	Senate Bill 652	CIX Concerns
Interconnections and network unbundling	• Requires LECs to interconnect with any other carrier or person offering telecom services or information services. • Imposes duty to offer unbundled components at just, reasonable, and non-discriminatory prices.	Specifically gives only telecommunication carriers rights to interconnections and unbundled network components.	Should law ensure that ISPs have rights to interconnections and unbundled network components for both POTs and emerging broadband networks?
Checklist that must be met before BOCs can offer interLATA service	• Requires interconnection agreements to be in place BOCs must demonstrate "facilities based" competition, but not necessarily alternate physical connections to the home.	• Requires FCC to set rules for entry within 60 days of passage of bill • Requires interconnection agreements	• Will the checklist provide a smooth transition for ISPs? • Will ISP get the network components they need including access to switch software, signaling services, etc?
Justice Department role	Justice Department to be consulted on lifting interLATA restrictions	Justice Department is not included in the process.	Will Justice Department involvement insure a "level playing field"?
Structural separation of new businesses from the Bell Operating Company	Requirements for structural separation are substantially different for different services	• One framework for all separate affiliates • Sets no sunset date, but requirements can be waived by FCC if there is adequate competition.	Will merging the two bills weaken or strengthen structural separation requirements?
Non-Discrimination Safequards	• Strong safeguards for electronic publishing • Weaker safeguards for interLATA service • No mention of Internet service	BOCs must provide other "persons"with the same "goods, services, facilities, or information" that it provides affiliates at same rate.	In the interest of a level playing field, all ISPs should be able to procure components from the LEC at the same price"
InterLATA Service	Structural separation requirements end after 18 months of BOC entry.	No sunset date. FCC can waive requirements if suitable competition	Structural separation requirements are important when there isn't true competition at the LEC
Internet Service to Schools	LECs must provide Internet service to schools through a separate subsidiary.	LECs can provide Internet services to elementary and secondary schools without the use of a separate subsidiary	Is it wise to weaken structural separation requirements?
Information Services	• Strong regime to require a separate subsidirary for "electronic" publishing • 5 year sunset provision	Requires separate affiliate for all information services not allowed prior to 1991	Is the language on information services applicable to the Internet or is it out of date?
Universal Access Fees	Telecommunication Carriers contribute universal access fees.	Telecommunication carriers contribute universal access fees	ISPs should not contribute to universal access funds
Complaint Procedures	Requires FCC to deal with complaints from small business (under 300 employees) within 60 days	Establishes process for negotiating interconnections with recourse to State.	How can ISPs quickly resolve disputes regarding anti-competitive practices?
FCC Role in Controlling Content on Internet	Cox-Wyden Amendment specifically forbids FCC from playing a role in controlling content	Exon/Coats amendment instructs FCC to create regulations to control obscenity and indecency	Poorly written law and regulations could be counterproductive and detrimental to ISPs and Internet
Criminal Liability	Revises Section 1465 of title 18 to make it a criminal offense to intentionally communicate obscenity to those under 18	Does Exon amendment impose criminal liability for making available obscenity or indecency?	House language is not as bad as Exon/Coates Amendment, but does House language still put ISPs and "free speech" at risk?

Capitol Hill Update

Telecom and Copyright Bills Get Attention

The House and Senate finally announced the conference committee whose job it will be to reconcile the House and Senate versions of the Telecommunications Act of 1995. Thirty-four members of the House and 11 Senators were named to what is by all measures a very large conference committee.

According to a House Commerce Committee staffer, the conference committee will report the Telecom bill before the Thanksgiving recess. A Senate Commerce Committee staffer cautioned, however, that the process was very fluid and that the Senate side had not committed to any deadlines. Most of the real work is going on behind closed doors as staff meet to first identify the areas of agreement in the bill and then to focus on areas of difference. Once the staff have done their work, the conference committee is expected to meet to vote on those differences between the House and Senate versions that cannot be ironed out by staff.

Late last month, CIX sent a letter to the House and Senate Commerce and Judiciary Committees expressing CIX's position on a number of parts of the telecommunications legislation. One area of CIX interest concerns how the Cox, Hyde, and Exon language will be combined in an effort to restrict obscenity availability over the Internet.

During the House debate, CIX strongly supported the Cox amendment which expressly forbade the FCC from regulating content. CIX also preferred the Hyde amendment, which was also offered in the House, to the Exon amendment that passed in the Senate. Though both Hyde and Exon impose criminal liability on those who make available obscene material, the Exon amendment among other things gives the FCC responsibility of determining when a provider has control, and thus responsibility, for obscene content.

According to CIX legal counsel Ron Plesser, CIX's position has three parts: first, though CIX can accept restrictions on obscene content and protections for those under eighteen years of age, the CIX position would not allow indecent speech on the Internet to be criminalized as is done by the Exon amendment; second, CIX wants liability to be defined so that service providers who are providing pure transport cannot be held liable for the content that they carry for others; and finally, CIX wants the resulting legislation to include a federal preemption over state and local regulations so that ISPs will not be forced to negotiate a maze of state obscenity regulations.

Copyright Bill

Senators Hyde (R-IL) and Leahy (D-VT) have introduced S. 1284 the NII Copyright Protection Act of 1995 based on the recommendations from the Working Group on Intellectual Property rights chaired by Assistant Secretary of Commerce Bruce Lehman. The bill, taken right from the Working Group's white paper amends the U.S. Code's definition of publishing to include "transmission." CIX has raised concerns that this change in language could put ISPs in jeopardy of being liable for any copyright violations in data they transmit.

A joint Senate-House hearing is planned for November 15th with Asst. Secretary Lehman and other government witnesses. This will be followed by hearings in January and February where industry and other interested parties will be invited to provide their comments on the working group white paper and the draft legislation.

A staffer on the House Courts and Intellectual Property Committee predicts that with bipartisan support in Congress and from the Administration, the bill will pass next session. He acknowledged that the bill will probably have to be amended to provide protections for those service providers who are providing transport or value added services such as searching. Crafting such an amendment, he added, will not be easy as there is strong sentiment that a certain degree of copyright liability is needed in the electronic world. ■

Will Foster covers Capitol Hill for CIXtra

Capitol Hill Update

Bill Reconciliation Difficult

The House and Senate Telecommunications Conference Committee met twice in early December to resolve inconsistencies between the House and Senate versions of the telecommunication bill. For the past three months, staff have been working to merge the two bills.

Though both bills share a "deregulatory" spirit, the complexity of the issues and of the compromises embodied in both bills has made the reconciliation process very difficult. On December 6th, the conference committee voted on and approved thirty-three staff recommendations including guidelines on how Bell companies can compete in electronic publishing and what interconnections they are required to provide.

The Conference Committee chose to use the detailed House language on separate subsidiary requirements for Bell entry into electronic publishing instead of the Senate language aimed at information services. Bells will be required to use a separate subsidiary for electronic publishing with separate books and financing. Cross-subsidies will be prohibited as will discrimination by the local exchange carrier against unaffiliated electronic publishers.

The House bill contained a sunset provision in the year 2000 for the separate subsidiary requirement, while the Senate gave the FCC the ability to waive the requirement if there is adequate competition.

At the time of the vote an agreement had not been reached on whether to use the House's or Senate's language. *CIXtra* has learned from a staff member on the committee that a compromise has been reached in which the separate subsidiary requirement will sunset by the year 2000, but the FCC will have the ability to extend it in markets where it feels the requirement is needed.

The committee also voted to include the Senate provisions on infrastructure sharing. These direct the FCC to prescribe regulations requiring local exchange carriers to make available to any qualifying carrier public switched network infrastructure, technology, information and telecommunications facilities for purposes of providing telecommunication services. There has been no official guidance so far as to whether ISPs should be considered telecommunication carriers and what kind of interconnections the LECs will be required to provide ISPs.

After the conference committee meeting on December 6th, the House conference committees members then met separately to choose between competing proposals from Rep. Rick White (R-WA) and Rep. Henry Hyde (R-IL) on how to approach Internet content regulation. The House conferees, by a 20-13 vote, chose Rep. White's approach which uses a narrowly targeted "harmful to minors" standard for judging illegal content. White's language also specifically excludes access providers from liability for the content they transport and prevents the FCC from regulating content

CIX worked very closely with Rep. Rick White as he modified the Cox-Wyden family protection amendment that had been approved by the House to develop a compromise position that could be adopted by both the House and Senate. Unfortunately, Rep. White's proposal was marred by a last minute amendment by Rep. Robert Goodlatte (R-VA) that by a vote of 17-16 replaced its clear, targeted and constitutional "harmful to minors" standard with the broad and constitutionally dubious "indecency" standard. The "indecency" standard is extremely vague, depending on each local community's notion of what is "patently offensive" material. Since the "indecency" standard is used in the Senate version of the bill, it is likely to now make it into the final legislation. According to CIX legal counsel Piper & Marbury, there is also a concerted effort on the part of the Christian Coalition to attack the provision in White's language that exempts access providers from prosecution for illicit content.

Though CIX has been working very hard to oppose the indecency standard, CIX's number one priority is to ensure that access providers are not liable for the content they carry. The second priority is to ensure strong preemption language to make sure that ISPs do not have to contend with a patchwork of local and state regulations on content regulations.

According to a Commerce Committee staffer, Senator Bob Dole (R-KS) and Commerce Committee Chairman Senator Larry Pressler (S-SD) are both committed to passing telecommunications bill in 1996. ■

Will Foster cover policy and regulatory issues for CIXtra.

CIXTRA

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Telecommunications Act of 1996

Using first a pen and then a "digital wand", United States President Bill Clinton signed the Telecommunication Act of 1996 into law. This Act, which has survived through three and a half years of intense battling in Congress, allows, among other things, BOCs, cable providers, and utilities into the Internet business. At the same time, the legislation seeks to ensure that telecommunication service providers have rights to the interconnections and unbundled components of the Local Exchange Carrier (LEC) that they need to create new telecommunication services.

CIX Board Member Ty Graves welcomes the passage of the Telecommunications Act because it allows his company, Fibrcom, to expand its business model from Texas to the rest of the United States. Though a recently passed Texas law permits Fibrcom to offer local switched telephone service along with 10MB Internet service to the home, the passage of a national telecommunications act will allow Fibrcom to expand its business model nationally without having to deal with different regulatory regimes in each state.

TELECOMMUNICATION SERVICE

Except for Sections 507, 502, and 509, which regulate obscenity and indecency on the Internet, the bill rarely mentions the Internet. In an effort to avoid locking any one communication technology into the law, the Act's drafters define the term "telecommunications service" as:

> ...the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used...The term 'telecommunications' means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

Telecommunication service providers are given certain rights under Section 251 of the Act to interconnect with the Local Exchange Carrier (LEC) and to purchase and resell unbundled LEC network components at wholesale. Though the LEC is defined as the "provision of telephone exchange service or access," the Act does not attempt to delineate the LEC's network components. ISPs may be able to use this Section to gain access not only to the LEC's switch and software, but also to the SONET ring, unbundled ISDN and ATM services, and new broadband networks.

Section 651(4)(b) does explicitly exempt LECs who are providing cable services through an "open video system" from having to make capacity available on a non-discriminatory basis. It is unclear whether the FCC will treat LEC broadband

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networks as extensions of the LEC network, or as parallel and separate systems. A BOC employee confided to *CIXtra* that the BOCs hope that if they build their broadband networks in parallel to their wireline networks, then their broadband network would be free of interconnection and unbundling requirements.

ONA/CEI FOR INFORMATION SERVICES

Though the earlier House version of the bill gave information service providers the same rights to interconnect with the LEC and purchase unbundled network components, the final Act does not do so. Instead, the Act temporarily keeps in place the FCC's existing ONA (Open Network Architecture) and CEI (Comparably Efficient Interconnection) until the FCC can create new rulings.

BOC ENTRY INTO INTERNET SERVICE AND ELECTRONIC PUBLISHING

There is some debate as to whether providing access to the Internet is an interLATA service. If Internet service is an interLATA service, the BOCs will need to meet the same competitive checklist to offer Internet service that they do to offer interLATA services. BOCs are required to have at least one interconnection agreement and one facilities based competitor. Most importantly, for three years after authorization, the BOCs must provide interLATA service through a separate affiliate.

There are different ground rules for BOC entry into electronic publishing. BOCs must create a separate affiliate for four years or join in a joint venture to engage in electronic publishing. ISPs who might be interested in a electronic publishing joint venture with a BOC should look at Sec. 274.

UNIVERSAL SERVICE FUND

ISPs, as enhanced service providers, have been exempted by the FCC from having to contribute to the Universal Service Fund. However, Section 254 (b)(4) states that "all providers of telecommunication services should make an equitable and non-discriminatory contribution to the preservation and advancement of universal service." Since it is unclear whether ISPs will be treated by the FCC as providers of telecommunications service, there is uncertainty as to whether ISPs may be forced to pay universal service fees.

This universal service mechanisms traditionally subsidized the installation of telephone service in remote areas. Now Section 254(b)(2) adds a requirement that "advanced" telecommunications and information services be provided in all regions of the nation.

The Act requires the FCC, within 30 days, to institute a Federal-State Joint Board to recommend changes in the FCC regulations and definitions for universal service within nine months. CIX legal counsel, will monitor the Joint Board's activities for signs that it may recommend to the FCC that universal service charges be levied on ISPs, or for recommendations that the FCC start using universal service mechanisms to provide Internet services to certain constituencies.

OBSCENITY AND INDECENCY

The Christian Coalition succeeded in pushing through Sections 502, which criminalizes obscenity and indecency on the Internet, and Section 507, which amends the criminal code's provisions prohibiting traffic in obscenity, to clarify that they apply to trafficking by means of interactive computer services.

Section 502 applies the indecency standard prohibiting any content on the Internet that "in context, depicts or describes, in terms patently offensive as measured by contemporary community standards, sexual or excretory activities or organs." CIX legal counsel, Ron Plesser, points out that this standard poses significant vagueness problems.

However, the Act's Conference Report attempts to narrow the standard to safeguard its constitutionality. It asserts that by focusing upon the "context" of the communication, the standard requires "two distinct elements: the intention to be patently offensive, and a patently offensive result." Accordingly, the conference report concludes that "material with serious redeeming value" will not be criminalized under this standard.

CIX, in a coalition of access and content providers, publishers and end-users, has filed suit in a US District Court in Philadelphia, arguing that the Internet should be regulated as a print rather than broadcast medium. This would give more First Amendment protections and less liability for content providers.

An earlier suit, filed by the ACLU with others, attacking the 'indecency' standard of the Act has resulted in an injunction, barring enforcement of the standard while the case is in the courts.

CIX , helping to lead a consortium of interested parties, was able to ensure that the providers of the means of communication—including ISPs—could not be held criminally liable under both Section 502 and Section 507 for providing access or connection to a system not under their control. Even ISPs that provide news feeds that contain obscene or indecent content will probably only be held liable if they "knowingly permit any telecommunications facility under (their) control...with the intent that it be used for such activity."

The Act sets forth "good faith" screening defenses available both to content and access providers that restrict minors from such communications including uses of a verified credit card, debit account, or adult access code. Individuals who want to publish indecent material on the Web can protect themselves by requiring use of a credit card or debit account to obtain access.

CIX was also successful in ensuring that both Section 502 and 509 of the Telecom Act preempt state and local restrictions on content so that ISPs do not face a hodgepodge of different rules and regulations. Section 509 provides the Good Samaritan defense that allows service providers to block IP addresses and content without fear of being therefore held liable for any content that they do allow to pass through. ■

Copies of the Act along with the CIX Legal Counsel analysis of the bill can be accessed at the CIX Web site (http://www.cix.org).

Will Foster covers Capitol Hill for CIXtra.

US Telecommunications Reform

Issue	Section #	Bill Specifications	Implications for Internet
Obligations of Local Exchange Carriers	Sec. 251		
Interconnection	Sec. 251 (c) (2)	The duty to provide any requesting telecommunications carrier with interconnections to LEC.	1) "Interconnections" are only mandated for the transmission and routing of telephone exchange service. 2) The bill is ambiguous as to whether ISPSs are providing telecommunication services and have rights to LEC interconnections under Sec 251.
Unbundled Access	Sec. 251 (c) (3) Sec. 259	Non-discriminatory access to network elements on an unbundled basis using just rates. (subject to FCC rule-making)	1) Unbundled network components are for the provision of a telecommunication service. 2) ISPS may have rights to unbundled network components from LEC. 3) Do ISPs have rights to "dark" fiber from the LEC?
Collocation	Sec. 251 (c) (6)	LECS have duty to provide collocation for interconnection or access.	ISPs may try and collocate ATM and other types of switches in central offices.
Access to Right of Ways	Sec. 251 (b) (4)	LECS must afford access to the poles, ducts, conduits, and right-of-ways.	It will be easier for ISPs to run their own fiber over LEC infrastructure.
Rights of Information Service Providers	Sec. 251 (g)	LECS must continue to provide information service providers with the same equal access and non-discriminatory interconnection obligations that they had under MFJ.	The ONA (Open Network Architecture) and CEI (Comparably Efficient Interconnection) regimes are still in place to protect ISPs.
Negotiation of Interconnection Agreements	Sec. 252 (b)	State Commission arbitrates if there is a failure with voluntary negotiations. FCC to intervene if State Commission fails.	ISPs may be able to use Sec. 252 to force negotiations with LECs.
Removal of State and Local Barriers to Entry	Sec. 253	States cannot have the effect of prohibiting any entity to provide any telecommunication service.	States or local governments cannot discriminate against one ISP in favor of another.
Universal Service	Sec. 254	Joint FCC-State Board will determine what services (including "advanced services") are supported by Universal Service.	CIX will work to ensure that Board does not impose universal service obligations on ISPs, nor subsidizes the provision of ISP services by certain carriers.
FCC Role in Coordinating Interconnectivity	Sec. 256	FCC shall establish procedures for overseeing coordination of telecom providers. FCC is authorized to participate in industry standards bodies.	Congress has limited FCC's role in setting standards for the Internet.

At-A-Glance

Issue	Section #	Bill Specifications	Implications for Internet
Bell Entry into InterLATA Service	Sec. 271	Bells must meet a set of conditions to offer interLATA service.	When Bells are authorized to provide interLATA service, are regulatory barriers to their provision of IP services removed?
Interconnection Agreements	Sec. 271 (c) (1) (A)	BOC must have at least one interconnection agreement.	
Facilities-based Competition	Sec. 271 (c) (1) (A)	BOCs must have competitor with some facilities.	
Competitive Checklist	Sec. 271 (c) (1) (B)	Must be in compliance with Sec. 251.	
Role of Department of Justice	Sec. 271 (d) (2)	FCC to consult with Justice Department and State Commissions	
Separate Affiliate	Sec. 272	LEC is required to provide interLATA service through a separate subsidiary. This requirement sunsets 3 years after BOC is authorized to provide interLATA services.	BOCs do not need a separate affiliate to provide Internet service to schools.
Out of Region	Sec. 271 (b) (2)	Bells can provide interLATA service outside their region without meeting checklist or using separate subsidiary.	
Bell Entry into InterLATA Information Services	Sec. 272 (f) (2)	Bells require a separate subsidiary to provide interLATA information services. This requirement expires 4 years after enactment of the Telecom Act of 1996.	CIX holds that a separate subsidiary is essential to guarantee a level playing field.
Electronic Publishing by BOCs	Sec. 274	BOCS must create a separate affiliate or join in a joint venture to engage in electronic publishing.	There may be opportunities for ISPs to partner with BOCs in joint ventures.
Criminilization of Indecent/ Obscene Communication on the Internet			
Obscenity Provision	Sec. 507	Punishes knowingly using an interactive computer service to transport obscene material in interstate or foreign commerce.	Internet access providers are not liable for providing access.
Indecency Standard	Sec. 502	Indecency is defined as depicting or describing, in terms patently offensive as measured by contemporary community standards, sexual or excretory activities or organs.	No Internet access provider shall be held liable simply for providing access or connection. State laws are preempted.
Good Faith Defenses	Sec. 502	Good faith efforts to prevent access by minors are a defense from prosecution.	ISPs and on-line providers who require a credit card to initiate service have a defense against prosecution.
Good Samaritan Protection	Sec. 509	Attempting to control content does not make one liable. State laws are preempted.	ISPs who filter IP addresses are not held responsible for those that they do not filter.

U.S. Legislative Update

Communications Decency Act

As a series of suits against the Communications Decency Act (CDA) work their way through the courts, legislation to repeal them have been introduced in the House and Senate. Senator Patrick Leahy (D-VT) has introduced S. 1567 to repeal the amendments relating to obscene and harassing use of telecommunications facilities.

On the House side, Representative Pat Schroeder (D-CO) has introduced HR 3057 to repeal the ban on abortion-related speech from the Comstock Act, the 123 year-old law governing the importation or transportation of obscene matters. The CDA amended the anachronistic Comstock Act to insure that interactive media could not be used to transport obscene information. In doing so, the CDA criminalized the exchange of information regarding abortion on the Internet. HR 3057 tries to rectify this situation by removing the restrictions on discussions regarding abortion from the Comstock Act.

Copyright Bill

CIX has been invited by the House Judiciary Committee Subcommittee on Courts and Intellectual Property to participate in a negotiating session on the issue of on-line service provider liability in relation to the protection of copyrighted works in the digital environment. CIX has been very active in raising concerns about provisions in the copyright bill, H.R. 2441, that equate transmittal with publishing. Under the original language drafted by the Administration, ISPs could potentially be held liable for any copyright violations that they unknowingly transmit.

CIX will initially work to come up with draft language that is acceptable to the other service provider representatives, including AOL, Bell Atlantic, MCI, and the United States Telephone (USTA). The service provider group will then negotiate with a group drawn from content providers and another group made up of organizations that are both content and service providers. If all three groups can quickly agree on draft language, Subcommittee Chairman Carlos Moorhead will consider incorporating it as a draft amendment to H.R. 2441. CIX, according to President Bob Collet, is committed to working for a statute that is supportable, scaleable, and responsive to technological change.

Easement Of Encryption Controls

On March 5, Senator Leahy (D-VT) introduced S. 1587, the "Encrypted Communications Privacy Act of 1996" which would lift many export controls on strong encryption hardware and software and affirm the rights of Americans to use whatever form of cryptography they choose. Senator Leahy recognizes that the Administration's current policy of allowing only applications with crippled cryptography (limited to 40 bits) to be exported is damaging US business interests and the Internet. Not only are American software firms restricted from providing solutions for their potential customers, but information infrastructure is threatened by the lack of good encryption solutions that work on a global basis.

The bill would remove all export restrictions on publicly accessible software and similar hardware. Netscape, for instance, would be able to make available anywhere their commercial browser with a 128 bit public key encryption. PGP (Pretty Good Privacy) encryption software could also be exported without fear of government persecution. In addition to significantly easing export controls, S. 1587 would prohibit any restriction on the domestic use or sale of encryption. The bill also imposes civil and criminal liability for unauthorized key disclosures and provide limits for access to keys by law enforcement.

Congressman Goodlatte introduced a similar bill, H.R. 3011, in the House. ■

Will Foster covers industry legislative and policy issues for CIXtra.

Encryption Issues Affecting Digital Commerce Security

Senator Conrad Burns (R-MT) introduced legislation for "The Promotion of Commerce On-line in the Digital Era Act of 1996." This bill, nicknamed "Pro-Code" is designed to remove barriers to encryption technology for the Internet.

The U.S. government currently labels "encryption software" as "munitions" and restricts the export of software with robust encryption. These restrictions have severely hindered the U.S. software industry which has had to provide "crippled versions" of software for export markets. In addition, these restrictions have severely retarded efforts to implement the level of "strong" encryption that is needed to implement commerce over the Internet.

Pro-CODE would:

- Allow the export of "generally available" or "public domain" encryption software such as PGP and popular World Wide Web browsers without requiring permission from the Department of State.

- Allow the export of encryption hardware and software not available in the "mass market" or "public domain" under an export scheme that would allow up to roughly DES-strength (i.e. 56 bit key-length) security if a product of similar strength is commercially available from a foreign supplier.

- Prohibit the government from imposing mandatory key-escrow encryption schemes domestically, or from restricting the sale of commercial encryption products within the United States.

- Prohibit the Department of Commerce from imposing government designed standards for encryption technologies (such as Clipper and Clipper II).

Pro-CODE is similar in many ways to S. 1587 a bill introduced earlier this year by Senator Leahy (D-VT), except that it is narrower in scope and does not contain criminal provisions or provisions imposing liability for third party key holders. Senator Leahy, in part because his bill is not moving in the Judiciary Committee, has announced his support for Pro-CODE which has been referred to Senator Burns' Subcommittee on Science, Technology, and Space. A Subcommittee staffer has said that the legislation will be on a relatively fast track starting with hearings in early June. The Commerce Committee Chairman Sen. Larry Pressler (SD) has indicated his interest in seeing the bill pass the Senate this summer and in having the final House Senate reconciliation pass before Congress adjourns in early October.

The Clinton Administration has not taken a formal position on Pro-CODE or on Senator Leahy's S. 1587. The Clinton Administration has generally favored encryption policies such as Clipper I and Clipper II that provided Justice Department with a back door into encoded transmissions. Recently deceased Commerce Secretary Ron Brown was the leading voice in the Administration for easing encryption export regulations. It is unclear whether Mickey Kantor, who has succeeded Brown as Secretary of Commerce, will take a stand on this issue.

Though rarely publicly discussed, a major concern in the U.S. government is whether citizens with "strong" encryption technology will have the capability of conducting business in cyberspace in a manner that cannot be traced by the Internal Revenue Service. There is even more concern that the National Security Agency may lose its ability to tap international financial transactions and messages.

In efforts to promote discussion regarding encryption in the Internet community, Senators Burns and Leahy are appearing in live, on-line discussions of this new legislation on America Online and HotWired's Club Wired. They have also broadcast e-mail messages to various mail lists. Senator Leahy even used a PGP signature for his message.

A staffer to Senator Leahy pointed out to *CIXtra* that though few people make the connection, encryption is emerging as a critical issue in many hearings that the Judiciary committee conducts. The protection of digital medical records, for example, requires strong encryption technologies. Encryption technology is needed to solve many of the problems brought about by the digital age. ■

Will Foster reports on Capitol Hill.

NTT Selling Strong Encryption Technology

Nippon Telegraph and Telephone Corp. (NTT) has begun selling encryption chips that utilize an RSA Data Key of 1,024 bits and a DES key of 56 bits. These keys are significantly larger than those permitted under US export law. However, since the chips are manufactured in Japan, US export laws do not apply even when these chips are imported into the United States.

The Japanese Government has recognized that encouraging encryption technology can be in Japan's national economic interest. Because Article 21 of Japan's Constitution specifically forbids wiretapping, the Japanese national security apparatus and the police do not have the same objections to encryption technology that their counterparts in the United States do. ■

Regulatory Update

WIPO Addresses Digital Copyright

On *May 20th the European* Commission and its Member States submitted language to the World Intellectual Property Organization (WIPO) to extend the Berne Convention to protect the rights of copyright owners when their content is transmitted with digital technology. They did not, however, specifically lay out the rights and responsibilities of ISPs and other service providers. There is a real danger that this language could, if accepted by the Berne signatories, result in national copyright laws that would hold ISPs liable for copyright violations on the part of their users.

In "The Berne Convention for the Protection of Literary and Artistic Works," an 1886 international treaty, signatory nations agreed to implement certain standards in their laws to protect copyright owners. Currently, 117 nations have signed it, thus agreeing to bring their laws and administrative practices into conformance with it. The Berne Convention, along with the Paris Convention for the Protection of Industrial Property, are administered by the World Intellectual Property Organization, a special United Nations agency. Over the past couple years, WIPO has convened a "Committee of Experts" to explore a possible protocol to the Berne Convention to extend the treaty to cover digital technology.

There has long been a commitment by European nations to protect "authors" rights to reproductions of their work. Their new language makes clear that any permanent or temporary storage of a protected work, including storing a copy in RAM, constitutes a reproduction that is afforded the same protections as the original work. It also makes clear that "authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works." The draft language goes on to make clear that it covers interactive access such as occurs on the Internet. Under this language, according to CIX legal counsel Piper Marbury, ISPs could be liable for display, transmission, or caching of a protected work without the permission of the author on systems they own or control including backbones, Internet access facilities, news sites, Web sites, Web caches, and chatrooms.

The European language is very similar in spirit to the White Paper that was generated by the United States Administration and which served as the basis of the copyright legislation in the US Congress. This White Paper which was also submitted to the WIPO, proposed that "transmission" of a work constitutes "distribution" of the work. CIX actively opposed this interpretation and was invited to participate in a task force to shape compromise language that protected the rights of both content owners and ISPs. CIX succeeded in developing compromise language that makes it clear that real infringers bear primary responsibility for copyright infringements and that there is shared responsibility between content owners and ISPs. Under the revised legislation, there is no liability at all for backbone services and no monetary liability for Internet access service. In addition, content owners have the responsibility to identify infringements and notify ISPs with penalties for false notices claiming infringement. ISPs are responsible for taking down infringing content, but get "Good Samaritan" immunity for doing so.

Unfortunately, the U.S. delegation has not advocated that WIPO adopt the compromise that has been reached in the U.S. House of Representatives. According to a source at the Patent and Trademark Office, the delegation is still pushing for inclusion of the "transmission is distribution" language of the White Paper, though the source sees some room for compromising with the European delegation.

The Chairman of the Committee of Experts, Jukka Leidis from Finland, is currently drafting a proposal which incorporates the European proposal along with language from other countries. On August 1, 1996, he will present a draft of the proposed treaty language to WIPO, which will submit it on September 1 to member countries and non-government participants for comment. During the fall there will be regional meetings that will lead up to a WIPO conference to conclude negotiations that will be held between December 2-20.

Jim Halpert, of CIX's counsel Piper

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Proposed language from the European Commission

RIGHT OF REPRODUCTION

"Contracting parties confirm that the permanent or temporary storage of a protect work in any electronic medium constitutes a reproduction within the meaning of article 9 of the Berne Convention. This includes acts such as uploading and downloading of a work to or from the memory of a computer."

RIGHT OF COMMUNICATION TO THE PUBLIC

"Without prejudice to the rights provided for in articles 11, 11bis, 11ter, 14 and 14bis of the Berne Convention, authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, including the making available to the public of their works, by wire or wireless means, in such a way that members of the public may access these works from a place and at a time individually chosen by them."

Continued from page 2

Marbury, warns that the European proposals are harmful and should not be incorporated into a treaty this year. He believes that WIPO should postpone making any decisions about extending copyright to digital media until next year after it has further examined how to balance the rights and responsibilities of access providers and content owners.

It is essential that delegations from throughout the world understand the importance of establishing the rights and responsibilities of ISPs in any treaty or legislation that seeks to extend copyright law to the Internet. ■

A list of WIPO delegations contact information is available at the CIX web site, www.cix.org.

Will Foster reports on legislative and regulatory affairs.

Capitol Hill Update

Encryption Issues Divide Industry, Administration

The Clinton Administration is attempting to use public concern over terrorism to build support for restricting encryption. As Congress prepared for its August recess, Clinton urged Congress to pass new counter-terrorism legislation before it recessed. The Administration called for stiffer controls on encryption in order to keep encryption technology out of the hands of terrorists. The Administration also — for the first time — publicly opposed legislation, such as the Pro-Code bill, that would remove restrictions on the export of encryption software and would allow US citizens to use encryption software to protect their communications. The Pro-Code bill has been picking up significant momentum in the US Senate and the Administration is now trying to use the "terrorism" issue to stop it.

Though the House of Representatives did pass a revised counter-terrorism bill by a margin of 389-2 on August 2nd, the bill does not contain provisions relating to encryption. When the bill comes up for a vote in the Senate after the August recess, however, it is likely that the Administration will once again try to tie "encryption" to the terrorism issue.

The Administration is also working through international organizations such as the G-7 nations to build support for multilateral restrictions on encryption as a means of fighting terrorism. ■

Will Foster reports on legislative and regulatory affairs. He can be reached t wfoster@cix.org.

WIPO Attempts to Extend the Berne Convention Treaty

As discussed in the July 1996 issue of *CIXtra*, World Intellectual Property Organization (WIPO) has been working for the past five years to develop an international treaty to extend the Berne Convention treaty to protect the rights of copyright owners when their content is transmitted using digital technology. If countries eventually choose to ratify this treaty, they will be committing to bring their national laws into conformance with it.

The draft language for the proposed treaty, which defines the rights of copyright holders, can potentially result in national legislation that creates liability for Internet Service Providers who might unintentionally transmit or store unauthorized material. More importantly, the proposed language may limit the ability of countries to strike the right balance between the rights of copyright holders and the responsibilities of service providers, such as ISPs.

One-hundred and seventeen (117) countries will potentially be attending the WIPO diplomatic conference to help craft the final treaty language. CIX Legal Counsel, Ron Plesser, urges CIX members to meet with their own national delegations between now and December to discuss the treaty. CIX members may contact myself at wfoster@cix.org for help in identifying their national delegation or for more information on the draft language.

In September, CIX along with other members of the Copyright Coalition met with Dr. Fiscor, the WIPO Assistant Director General, to discuss the impact of the treaty on ISPs. Though Dr. Fiscor was very receptive to CIX's concerns, he emphasized that it is WIPO's policy to only define the "rights" of copyright holders. WIPO leaves it up to individual countries to determine the liabilities of particular violations and the associated liability. In fact, Note 10.21 of the draft language explicitly states that: "This proposed international agreement determines only the scope of the exclusive rights that shall be granted to authors in respect to their works. Who is liable for the violation of these rights and what the extent of liability shall be for such violations is a matter for national legislation and case law according to the legal traditions of each Contracting Party."

However, the treaty language defines "reproduction" in a manner that has the potential to ensnare ISPs. The treaty explicitly gives the authors of literary and artistic works the exclusive right to authorize reproductions of their work. In Note 7.01, the writers assert that reproduction "clearly includes the storage of a work in any electronic medium; it likewise includes such acts as uploading and downloading a work to or from the memory of a computer." Under this definition, almost all services an ISP provides could involve "reproduction".

In addition, Article 10 creates a new right, the exclusive right of authorizing any communication of a work to the public. Section 10.14 makes it clear that "if, at any point, the stored work is made available to the public, such making available constitutes a further act of communication which requires authorizations." The implication of Article 10 is that ISPs need to make sure that no copyrighted material is transmitted without the author's permission.

Plesser is concerned that the way that articles 7 and 10 are written would preclude the type of legislation, that CIX is negotiating in the U.S., and a mistake to define ISP liabilities on a country by country basis. CIX is working with others to develop targeted changes that will give nations the ability to balance the rights and liabilities of ISPs and will ensure ISPs are subject to similar liabilities in all countries in which they operate. ▼

Will Foster covers Capitol Hill for CIXtra

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The New 105th U.S. Congress and the Internet

Senator Larry Pressler (R-SD) who as Chairman of the Senate Commerce Committee spearheaded passage of the Telecommunications Act of 1996 will not be coming back to the U.S. Congress. He was not re-elected. It is likely that Senator John McCain (R-AZ), who was one of a handful of Senators to vote against the Telecommunications Act of 1996, will become the new Commerce Committee Chairman. McCain believes very strongly in the "free market" and favors a "date certain" when all restrictions on the Bell companies' ability to compete are lifted. In addition, Rep. Jack Fields of the House Subcommittee on Telecommunications and Finance has retired. Rep. Billy Tauzin (R-LA) is expected to replace Fields as Chairman of the Subcommittee.

UNIVERSAL SERVICE & INTERCONNECTIONS

The Telecommunications Act of 1996 left many key decisions regarding interconnections with the Local Exchange Carrier (LEC), access charges, and Universal Service up to the FCC and the States. Internet Service Providers have a stake in these decisions which will determine whether they pay access charges, are able to get subsidies for providing Internet access to schools, and have access to LEC unbundled network components. Though McCain has indicated an interest in holding hearings on Universal Service, it is not clear how actively he or the rest of Congress will intervene in the implementation of the Telecommunications Act.

CONTENT CONTROLS

If the Supreme Courts upholds the Philadelphia court's ruling that the indecency portion of the Communications Decency Act (CDA) is unconstitutional, then CIX legal counsel James Halpert foresees efforts on the part of the Christian Coalition to try and introduce new legislation to control content. CIX will work very hard to ensure that any new legislation does not abolish the defenses for ISPs that CIX succeeded in having included in the CDA. It is important to note that the Philadelphia court only ruled the "indecency" restrictions unconstitutional and let other parts of the CDA stand such as the restrictions on obscenity and the protections for those who provide access to facilities not under their control.

PRIVACY PROTECTIONS

In the next Congress, CIX legal counsel Ron Plesser predicts that there will be more attention paid to the privacy issues that are emerging as the Internet moves from an academic tool to a major platform for commerce. Rep. Bruce Vento (D-MN) plans on re-introducing his privacy bill, based on a Minnesota law, that would apply many of the cable act subscriber privacy provision to interactive computer services. According to his Legislative Assistant, Vento wants to rework the bill to clarify liability issues specifically for service providers. Congressman Ed Markey (D-MA), who was instrumental in getting both the Federal Trade Commission (FTC)

continued on page 2

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and the Federal Communications Communication (FCC) to start examining privacy issues surrounding the Internet, promises to be very involved again this year. The FTC will be holding a 2nd set of hearings on privacy and the Internet in January.

It is unclear how Congress will respond to the European Union directive that European companies only transmit information to countries that have adequate privacy protections. Ira Magaziner, a special assistant to President Clinton, should be releasing a study this month that will make recommendations on what the Administration's policy should be in regards to the EU's directive and other commerce issues.

ENCRYPTION

In many different forums, the Clinton Administration has been repeatedly advised that the best way to safeguard privacy is to promote strong encryption. The Administration,

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however, continues to insist on a key recovery system that would allow government access to encrypted communications under a court order. On November 15, 1996, President Clinton signed an executive order that allows the export of more complex encryption products provided that a key recovery system is implemented. Senator McCain and other senators have expressed concern with the Administration's revised position.

"There will be more attention paid to the privacy issues that are emerging..."

During the last Congress, Senator Conrad Burns (D-ND) and Senator Patrick Leahy (D-VT) introduced the Promotion of Commerce Online in the Digital Era (Pro-CODE) that lifted restrictions on the export and use of encryption software. Senator McCain co-sponsored the bill last year and is expected to support similar legislation this year.

COPYRIGHT

Last spring, CIX helped to develop compromise legislation that recognized the rights and responsibilities of ISP who transmitted copyrighted material. CIX member Scott Purcell testified before Congress could be forced out of business if they are held liable for the content they transmit. CIX participated in congressionally sanctioned negotiations between content owners and access providers and was able to add into the bill defenses for access providers who provided a "mere conduit". This "mere conduit" defense was specially written to protect the services offered by ISPs.

The U.S. Patent and Trademark Office which last year argued in a white paper that any transmission of digital material should be considered publication, is now considering the "mere conduit" defenses in legislation that it plans to re-submit to Congress next year. CIX is also working to convince the Administration to offer the "mere conduit" defense at the World Intellectual Property Organization (WIPO) Diplomatic Conference that is being held this December in Geneva.

Congressman Carlos Moorhead (R-CA), the Chairman of the House Subcommittee on Courts and Intellectual Property, has retired. Congressman Bob Goodlatte (R-VA), who negotiated the compromise between the content owners and the access providers, will rise in seniority but may not become chairman of the committee.

CONGRESSIONAL INTERNET CAUCUS

Not only was the 94th Congress the first Congress in fifty years to pass major telecommunications legislation, it was also the first Congress to make the Congressional Record and all legislation easily available through the use of the World Wide Web. Congress' ability to make sound judgments regarding the Internet is linked to its ability to use the technology effectively. Over sixty members of Congress have joined the Congressional Internet Caucus and have taken an on-line pledge in which they agreed to post a web site and/or maintain a public email. In addition, they pledged to help educate their colleagues about the Internet.

CIX is on the advisory board of the Congressional Internet Caucus and in this role is educating members of Congress on the needs of the Internet Service Provider industry. CIX is also working with the Caucus to expand the availability of government information on the Internet and to increase the use of electronic mail in constituent communications. ▼

Will Foster covers Capitol Hill for CIXtra

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Asian Pacific ISPs Gather in Hong Kong

Internet Service Providers (ISPs) from through out Asia and the Pacific at the end of January came to Hong Kong for a number of different though related events. These meetings were associated with APNIC, APNG, APPLE, APIA and included the APRICOT Conference. The events demonstrated the vitality of the Asian Pacific Internet community as it works to build both the technical and administrative infrastructure needed to support the rapidly evolving Internet in the Asia Pacific region.

"...the events demonstrated the vitality of the Asian Pacific Internet community..."

APRICOT

The Asia Pacific Regional Internet Conference on Operational Technologies (APRICOT) is an annual conference whose mission is to spread and share the knowledge required to operate the increasingly complex Asia Pacific Internet topology. The first APRICOT was held last year in Singapore. This year over 609 people attended the conference coming to Hong Kong from 25 different countries.

Two days of tutorials proceeded the conference and focused on Internet technologies from ATM and IP to SENDMAIL. Robert Collet, CIX Chairman of the Board, gave the keynote address on ISPs and the Internet Business Ecosystem. The tutorials and the conference that followed provided opportunities for the participants to tap the expertise of speakers, many of whom are experts in their field.

The highlight of the show was an Internet Exchange Test Bed that was based on a DEC Gigaswitch and included 8 separate incoming T1s. There was a good deal of discussion throughout the conference of the merits and the design of national and regional exchange points such as the one being proposed by the ASEAN nations.

ASIA PACIFIC POLICY AND LEGAL FORUM (APPLE)

National NICs were the subject of a panel on the APPLe track at APRICOT. Gopi Garge (India), Tommi Chen (Malaysia), Roger Hicks (New Zealand), and Mathias Koerber (Singapore) and Norbert Klein (Cambodia) shared their experiences in starting and running national NIC for the allocation on domain names. The trademark issue was discussed and most agreed that the NIC should not be put in the position of adjudicating trademark disputes. Bill Manning gave an overview of how IANA chose NICs for various countries and hinted that government stationary carried a lot of weight in IANA's decisions as to what organization in a country would be the NIC. The panelists pointed out that NICs receive their authority both from above from IANA and from below from the community they serve. This community is broader than just the ISPs in the country and extends to all who own domains in the country. It was agreed that a NICs ability to function with the support of its stakeholders is critical to its success.

Later in the day, there was a panel

continued on page 2

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that explored Internet governance issues in general and specifically, the International Ad Hoc Commission's (IAHC) forthcoming recommendations to create new top level domains. David Maher, a member of the IAHC, provided input on how the IAHC had made its decisions. Geoff Huston, another IAHC member, also participated. Questions were raised by the audience as to how well Asia had been represented on the IAHC. The concern was raised that creating new top level domains would weaken the influence of the national NICs. Some felt that the IAHC's recommendation to allocation registries by region would be a plus for the Asian Pacific region. No clear consensus emerged from the two and half hour session.

ASIA PACIFIC INTERNET ASSOCIATION (APIA)

The Asia Pacific Internet Association (APIA) held its first meeting at APRICOT. APIA is a trade association whose goal is to promote the Internet industry. It is not limited just to ISP but is open to all businesses involved with the Internet. APIA's goal is to develop industry standards, guidelines, authorization, and projects for common services. It also wants to develop industry-wide agreement on common business issues. One of its deliverables is to influence policymaking at the national and regional levels.

The organizers made clear that they were interested in both promoting the Internet industry in Asia and in creating a voice for the Asian Pacific Internet industry in the U.S. and the European Union. Network Computer standards process was mentioned as an example of the kinds of activities that APIA members have a stake in and that APIA should try and influence.

APIA is currently being run by a steering committee until a Board of Directors is elected in May. The steering committee includes Toru Takahashi (Internet Assn. of Japan), Pindar Wong (DynaLab, HK), Jin Ho Hur (Inet, KR), Li Xing (Tsinghua Univ., CN), Tommi Chen (Asiapac.net, MY) and Barry Greene (Cisco, SG).

CIX Executive Director Barbara Dooley has accepted a position on the advisory board for APIA. At the meeting, she stated CIX's commitment to work with and support APIA.

APNIC

APNIC, which is responsible for the allocation of IP numbers in the Asia Pacific region, held its annual meeting the day following APRICOT. Two new board members were chosen. Dr. Xing Li, the deputy director of the China Education and Research Network (CERNET), was elected on the first ballot while Dr. Kwan Ho Song who has supervised the Korea NIC was elected on the third.

There was considerable discussion of Director General David Conrad's announcement that APNIC may be forced to move its headquarters from Japan where it is incurring significant tax liabilities. The other major item of discussion revolved around a proposed plan to allow confederations of ISPs to join APNIC. There is momentum in some Asian countries to create national confederations that can allocate IP numbers to ISPs in the country and can service them in the national language and with an understanding of national circumstances. It is possible that these confederations will remove some of the overhead on APNIC as well. Concern was voiced, however, that the confederations could undermine the financial stability of APNIC as members joined a confederation and stopped paying their membership dues. The challenge is to develop a pricing structure for confederations who join APNIC that reflects the costs of supporting the confederation and its members. A decision on confederations was postponed.

CONCLUSION

ISPs in Asia Pacific are hard at work building both their own networks and national infrastructure such as national exchange points, national NICs, and potentially national confederations for the allocation of IP addresses. At the same time, they are investing in regional initiatives such as APNIC and APIA.

National and regional initiatives are regarded as being mutually supportive and seen as contributing to the global Internet. ▼ *Will Foster covers Internet governance and policy for CIXtra*

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WTO and Basic Telecom Services

On February 15, 1997, the World Trade Organization (WTO) successfully concluded nearly three years of extended negotiations on market access for basic telecommunications services. Though there was extensive press coverage of the agreement, there has been little discussion of its potential impact on ISPs.

As part of the agreement, sixty-nine governments committed to opening their markets to international competition in basic telecommunication services. Schedules of their individual commitments were annexed to the Fourth Protocol of the General Agreement on Trade in Services (GATS) that was negotiated in 1994 in Uruguay as part of the General Agreement on Trade and Tariffs (GATT).

At the beginning of the negotiations, each nation was asked to define basic service. Because there was little agreement, participants agreed to set aside national differences in how basic telecommunications might be defined domestically and to negotiate on all telecommunications services both public and private that involve end-to-end transmission of customer supplied information.

Most agreed to a Reference Paper that defines a common regulatory framework that specifies that interconnections with major suppliers be ensured "under non-discriminatory terms, conditions, and rates...in a timely fashion, on terms, conditions (including technical standards and specifications) and cost-oriented rates that are transparent, reasonable, having regard to economic feasibility, and sufficiently unbundled so that the supplier need not pay for network components or facilities."

There was very little discussion during the negotiations of whether this regulatory framework applied to ISPs who wanted to interconnect with the telephone company, a international carrier, or even another ISP. Most experts that *CIXtra* talked to assume that ISPs, as value-added services, have rights to access and use public telecommunications transport networks under schedules already submitted for GATS three years ago by fifty-five governments. Though the interconnection language for value-added services is similar to that for basic services, it is different and does not have mandates requiring reasonable cost.

Kelly Cameron of the Federal Communication Commission (FCC) told CIXtra that the interpretation of whether ISPs have the rights of basic or value-added telecommunications service providers will depend on what country the ISP is operating in. If the country considers an ISPs a basic telecommunications service then the basic telecommunications rules would apply, and if it considers it a value-

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added or enhanced service, then the value-added rules would apply. Cameron even foresees a situation where an ISP is considered to provide both enhanced and basic services.

Under the WTO agreements, countries are only obligated to provide what they commit to in their schedules to the firms of other signatory countries. A U.S. company can not take the US government to the WTO. Once the national legislatures of the sixty-eight countries ratify their countries' schedules, then the countries are legally required to honor the schedules. Challenges can be brought against a country who fails to do so under the WTO's dispute settlement system which has the power to impose sanctions on violators.

The WTO agreement on basic telecommunication services will not only result in increased competition in basic telecommunication services in the sixty-nine signatory nations, but will also impact other nations which will feel compelled to follow suit in opening their markets to firms from other countries.

Countries that are participating in WTO agreement on basic telecommunication services: Antigua & Barbuda, Argentina, Australia, Bangladesh, Belize, Bolivia, Brazil, Brunei Darussalam, Bulgaria, Canada, Chile, Colombia, Ctte d'Ivoire, Czech Republic, Dominica, Dominican Republic, Ecuador, El Salvador, European Communities and its Member States, Ghana, Grenada, Guatemala, Hong Kong, Hungary, Iceland, India, Indonesia, Israel, Jamaica, Japan, Korea, Malaysia, Mauritius, Mexico, Morocco, New Zealand, Norway, Pakistan, Papua New Guinea, Peru, Philippines, Poland, Romania, Senegal, Singapore, Sri Lanka, Switzerland, Slovak Republic, South Africa, Thailand, Trinidad & Tobago, Tunisia, Turkey, United States and Venezuela. ▼

Will Foster writes on Policy and International issues for CIX.tra.

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FCC: No Access Charges

Important Victory For ISPs

On May 7th, 1997, the US Federal Communications Commission (FCC) adopted orders reforming the Universal Service Fund and the Access Charge regimes. The FCC chose not to allow Local Exchange Carriers (LECs) to charge ISPs long distance originating access charges (currently $.028 per minute) or other charges based on usage sensitive pricing. "The decision of the FCC to keep the Internet Service Provider industry unregulated was a major victory" stated CIX Legal Counsel Ron Plesser of Piper & Marbury LLP.

ACCESS CHARGE REFORM

Under the access charge reform order, LECs must charge ISPs in the same manner as any other business end user and can not initiate higher pricing specifically targeted at ISPs. This is good, Mr. Plesser points out, because it is very unlikely that rates for business users as a group will be dramatically raised.

The FCC has restructured the way that LECs are compensated for providing the common infrastructure for originating and terminating interstate calls. While decreasing the per minute access charges that IXC's are required to pay to LECs, the FCC has increased the fixed charges that residential users will pay for a second line and that businesses will pay for multiple lines.

The FCC raised the Subscriber Line Charge (SLC) ceiling in 1998 for residential second lines to $5.00 per month and for business multilines to $9.00 per month. The actual SLC will probably be lower than the ceiling; the FCC estimates that in 1998 the average SLC for business multilines of incumbent price-cap LECs will be approximately $7.61 per month.

> *"The decision of the FCC to keep the Internet Service Provider industry unregulated was a major victory."*

The FCC has been debating for a number of years how to apply SLCs to multichannel services such as ISDN. Based on cost data, the FCC has set the SLC rate for Basic Rate Interface (BRI) ISDN at the analog rate, while the SLC ceiling for Primary Rate Interface (PRI) ISDN was set at five times the multline business SLC rate.

The FCC also ordered an increase of the Presubscribed Interexchange Carrier Charge (PICC) ceiling to $1.50 per month for additional residential lines and $2.75 per month for business multilines (commencing in January, 1997) from its present base of $0.53. Though the LEC typically would charge the PICC to the end-user's presubscribed IXC, the order allows LECs to bill PICC charges directly to end users who have not selected an IXC on

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Access Charge Victory for ISPs

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their multilines. The PICC ceiling for business multilines will increase by $1.50 every year, though it is not anticipated that actual PICC charges will increase by that much. The PICC for BRI ISDN service will be the same as for an analog line, while the PICC for PRI ISDN will be five times that of a business multiline.

The SLC and PICC charges make up only a portion of the charges for both residential and business wireline service. The total cost of service also includes intrastate charges that are determined by individual state commissions.

In the same order, the FCC stated that it does not believe that incumbent LEC allegations about networking congestion warrant imposition of interstate access charges on ISPs. CIX sees this as a rejection of usage sensitive fees that would apply specifically to ISPs. "With the resolution of these regulatory issues, CIX is looking forward to continued discussion of technological rather than regulatory solutions to PSTN network congestion." Ms. Dooley executive director of CIX stated. "It's in everyone's interest to have both a stable PSTN and efficient, low-cost Internet access."

Universal Service Fund Reform

On the same day, the FCC released a separate order on Universal Service Fund Reform that included provisions for $2.25 billion in subsidies for schools and libraries for telecommunications services, Internet access, and internal connections. Eligible schools and libraries will enjoy discounts ranging from 20% to 90%, higher discounts being provided to those schools with more disadvantaged students. These discounts will be funded through subsidies to the provider out of the Universal Service Fund.

The FCC order permits both telecommunication common carriers and ISPs to bid on these opportunities that will be advertised on the Web. The contracts will be awarded to the lowest bidder. The provider that wins a contract to offer subsidized service must obtain the subsidy directly from the Universal Service Fund administrator.

The Telecommunications Act of 1996 requires all telecommunications carriers to contribute to universal service support. However, the FCC has ruled that "information service providers (ISP) and enhanced service providers are not required to contribute to support mechanisms to the extent they provide such services." The current order recognizes that the classification of Internet-based services as either telecommunication providers or enhanced service providers raises many complicated and overlapping issues. The FCC will continue to pursue this question of the status of ISPs through a Notice of Inquiry (NOI) regarding ISPs and the public switched telephone network that it began at the end of last year. CIX has filed comments with the FCC on this NOI and is actively engaged in discussions with the FCC.

"With the announcement of the resignation of the Chairman of the FCC Reed Hunt and the vacancies for all but one of the other commission seats," Ms. Dooley warned, "CIX must remain vigilant to ensure that the progress that we have made under the Access and Universal Service orders continues." CIX also notes that there will undoubtedly be court challenges and further FCC revisions to the Universal Service and Access Charge Reform rules. ▼

Will Foster is a regular contributor to CIX.tra on regulatory, international and policy issues.

ACCESS CHARGES

	To Day		7/1/97		1/1/98	
	SLC	PICC	SLC	PICC	SLC	PICC
Residential						
Single Line	$3.50	$.053	$3.50	$0.53	$3.50	$0.53
Additional Line	$3.50	$.053	$3.50	$0.53	$5.00	$1.50
Businesses						
Single Line	$3.50	$.053	$3.50	$0.53	$3.50	$0.53
Multiline	$5.60	$.053	$6.00	$0.53	$7.61	$2.75

From FCC <http/www.fcc.gov/Bureaus/Common_Carrier/News_Releases/1997/nrcc7034.html>

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CIX Criticizes CEI Plan From Southwestern Bell

In July 1997, CIX filed comments with the FCC criticizing Southwestern Bell Telephone Company (SWBT) Comparably Efficient Interconnection (CEI) Plan for Internet Support Services, because it bundled intralata and interlata service together.

> *"CIX has been aggressively using the CEI process to insure a level playing field"*

Customers who purchase Internet service from Southwestern Bell are forced into using the interlata services of the one company that Southwestern Bell has chosen to partner with.

The Bell Operating Companies are required under the FCC Computer 3 Order to file CEI plans when they offer enhanced services such as Internet access. In these filings they must demonstrate that access to a carrier's basic services is equal in quality, but not necessarily identical to the access the carrier uses to produce enhanced services. The BOCs must provide other enhanced service providers who compete with them access to comparably efficient interconnections.

The Telecommunications Act of 1997 did not proscribe a new set of rules for what services Local Exchange Carriers (LECs) must provide enhanced service providers such as ISPs. Congress did choose to let the existing regime stay in place, while giving the FCC the authority to revise the regime. Indeed, the FCC has let CIX know that it intends on beginning a notice of inquiry (NOI) process regarding enhanced services.

Given the BOCs control of the local loop, CIX has been aggressively using the CEI process to insure a level playing field. In CIX's comments on the SWBT CEI filing <http://www.cix.org/swbt.html>, CIX protested that SWBT violates 'equal access' because it intends to chose one ISP to carry its interlata traffic in each area and exclude all competitive ISPs from its in-region Internet subscribers. By bundling the services of the chosen Interlata ISP with its own Intralata internet services, SWBT creates a competitive disadvantage for the other ISPs which is in violation of Section 271 of the Telecommunications Act.

CIX, on the other hand, found real merit in Bell Atlantic/Nynex CEI filings which gives customers the right to choose which interlata ISP they want to use with Bell Atlantic's dial and leased line Internet Service.

CIX's filing in support of Bell Atlantic/Nynex CEI plan is at <http://www.cix.org.bacei.html>. CIX Members who are interested in copies of the SWBT and Bell Atlantic CEI filings can send e-mail with their address to wfoster@cix.org.

With the rapid entry of the BOCs into Internet service, ISP should use CEI filings as a tool for ensuring a level playing field. ■

Will Foster reports on telecommunications policy and Internet governance issues for CIXtra.

Interview: Ira Magaziner

by Will Foster

Editors note: Ira Magaziner, the Clinton Administration's Senior Advisor for Policy Development, wass the head of the working group that authored the government's "Framework on Global Electronic Commerce." In the interview Mr Magaziner discusses the Notice of Inquiry (NOI) on domain names and ARIN. ARIN was approved on June 24, 1997 without a NOI. The NOI on domain names was issued six days later.

CIXtra: What is in the "Framework for Global Electronic Commerce" for ISPs?

Magaziner: We believe that the kind of strategy that we are proposing if we can successfully achieve the kinds of global agreements that it calls for will allow electronic commerce to take off and growth will be tremendous in terms of economic activity taking place across the Internet. If that happens of course ISPs will realize a tremendous benefit. Electronic commerce is an application that will drive a lot of people to come to the Internet.

CIXtra: There is a growing battle in our society between the content owners and ISPs. What is the administration's view on the role of copyright in the digital era?

Magaziner: We have been involved in a lot of discussions in the United States with both content holders, ISPs, telecommunications companies, librarians, and the range of people who are concerned about these issues. There is a broad agreement that there should be some sort of copyright protection for content holders. I think the WIPO treaties negotiated in December 1996 provides the basis for that.

The debate that we are about to enter into again in the U.S. as we seek to ratify these treaties is the question about how you balance liability and provide an ample fair use doctrine which obtains (for the public interest) and also questions of how you deal with competing devices and things of this sort.

Having talked to all of the different sides quite often, I think that there are compromises possible here that will balance the interests of copyright holders with the concerns that ISPs, telecommunications people and others have about liability and fair use. I don't want to prejudge in an interview what these compromises will be. My sense is there is a solution that will protect copyright but at the same time deal with the liability and fair use issues.

CIXtra: Do you think it is possible for Congress to work out that compromise legislation given the stakeholders involved?

Magaziner: I hope so and think so. I think the various stakeholders know they need to come to an agreement. I think that the congressional process of treaty ratification and the associated discussions that will take place around liability and fair use I believe will come to resolution.

CIXtra: Is this a two year process, a five year process?

Magaziner: I hope that this is something that can be done this year. It is one of the things that we are going to be calling for. We are going to be calling for the ratification of these treaties and agreement on coordinating issues in the next year.

CIXtra: Has the PTO's language for copyright legislation stalled in the Secretary Commerce's Office?

Magaziner: I don't think I would put it that way. On questions of patent and trademark issues the Secretary of Commerce is taking the lead for the administration. Our strategy overall is to define nine different issue areas with different lead agencies on each issue and coordination with the White House. For example, on questions of taxation, the treasury has the lead and on questions of patent and trademark, the Secretary of Commerce has the lead and is working with all the stakeholders to prepare the enabling legislation. The process is not stalled, but the staff are forming their policies and the interagency group that I am coordinating along with the Vice President's office will engage in a discussion once they have developed some preliminary policies.

CIXtra: Who Governs the Internet?

Magaziner: There isn't one answer to that question. Ideally, our paper is calling for as much as possible, private sector leadership. In certain areas there should be private sector coordination, private sector leadership and private sector self-regulation free of government.

There are certain areas where government has to play a role, for exam-

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Interview

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ple, anti-fraud laws, if you have industry self regulation with privacy suppose and "E-trust" seal of approval develops where a seller represents to a buyer that they are going to only use information in a certain way. They specify that and the buyer then sends, "ok, I'm going to give you this information." Then if the seller goes out and violates that, or they put up a seal signifying "E-trust" and then they don't do it, then you need anti fraud laws which we now have in other areas that can provide some legal recourse. In that sense, there is a government role.

The main thrust of our strategy is to say that this should be a decentralized medium and a privately run medium as much as possible. That is part of the real strength of the Internet as a private, decentralized, creative medium should not be stifled by government regulation.

CIXtra: Some would argue that shunning is a form of governance. Can ISPs collectively shun an ISP or customer that is doing something that is judged harmful to the community? Would that violate anti-trust laws?

Magaziner: It depends. The Internet will have lots of different forms of governance. On things like technical standards, you are going to have private sector groups that compete for standards. We are trying to move more towards a private competitive system. On domain name allocation for example we are avoiding government control of that. There will be certain "rules of the road" and things of that sort that will be developed. In certain areas, the ISPs will play a role. In other areas, ISPs and browsers will build in rating systems and filtering systems which consumers can use. It is not possible to categorically say one or the other. Certainly if a group of ISPs got together and tried to control every aspect of the net they would run into anti-trust problems. On the other hand, If there was an ISP that was behaving unlawfully in a series of ways where there was consensus agreement. For example, if there was an ISP that was encouraging violations of security and privacy, or exploiting copyright or promoting child pornography, or whatever else, the government might not object to shunning. Issues of antitrust are handled by the Justice Department not the FCC.

CIXtra: When does the notice of inquiry on IP numbers and domain names coming out?

Magaziner: We will have some announcements to make this week about ARIN and IANA. The Secretary of Commerce will also put out a request for comment on domain names. There is a forty-five day process to provide comment and we are interested in hearing from everybody.

CIXtra: Lots of people here are concerned with whether they can participate in the RFC process, especially people from outside the United States.

"there are compromises possible here that will balance the interests of copyright holders with the concerns that ISPs. . ."

Magaziner: We are going to put up a request for comment on the Internet and anyone can comment from around the world. Comments that are submitted electronically will be posted. We do not have the budget to scan and post all responses submitted in paper format however, they will be available in a viewing room in Washington, D.C. ■

Will Foster reports on telecommunications policy and Internet governance issues for CIXtra.

CIX.tra

COMMERCIAL INTERNET EXCHANGE

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FCC: Changes and Challenges

By Will Foster

The Senate Commerce, Science, and Technology Committee has approved the nominations of the new FCC Commissioners:

William E. Kennard, Chairman
Harold Furchtgott-Roth, Commissioner
Michael K. Powell, Commissioner
Gloria Tristani, Commissioner

These four will join current Commissioner Susan Ness on the Commission when and if the Senate approves them in the coming month. CIX Legal Counsel Mark O'Connor of Piper & Marbury expects the new Commission to be at work by the middle of November.

"CIX will guard against any attempt to redefine Internet service in a manner that may result in ISPs having to pay more access charges."

NPRM On Information Services And Access Charges

O'Connor also predicts that the FCC will issue a Notice of Proposed Rulemaking (NPRM) on Information Services and Access Charges before the end of 1997. Though it is unclear what the scope of this rulemaking will be, CIX will guard against any attempt to redefine Internet service in a manner that may result in ISPs having to pay more access charges. In an inquiry earlier this year, the Commission tentatively concluded that providers of information services (including Internet service providers) should not be subject to the interstate access charges that local telephone companies currently assess on long-distance carriers. However, in this new round of proceedings the Commission could impose a new definition of Internet service which could have lasting consequences for ISPs.

According to Barb Dooley, CIX Executive Director CIX's primary goal is to preserve for ISPs the Enhanced Service Provider (ESP) exemption from paying access charges. The ESP definition makes sense for most of the 4,000 ISPs in the United States. Dooley, added that though some ISPs are choosing to register as telecommunications carriers, it would be disastrous to force all ISPs to do so.

CEI Requirements

The FCC will also release a Further Notice on revamping the Comparably Efficient Interconnections (CEI) requirements in lights of the Telecommunications Act of 1996. Currently, Bell Operating Companies (BOCs) that are offering enhanced services must file plans that detail how the BOC is going to insure that enhanced service providers have access to basic telecom facilities on terms that are equivalent to what the BOC gets. Over the past couple years, CIX has actively read and responded to BOC CEI filings. According to O'Connor, it has been important to have them and it is important that the process be maintained even if it is refined.

As technologies such as xDSL mature, ISPs may want to take advantage of unbundled network components and even collocation services to

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offer new services to their customers. However, existing CEI regulations do not require co-location nor access to unbundled network components as part of interconnection requirements. CIX will use this CEI Notice to work towards a CEI process that provides a level playing field for ISPs competing against the BOCs in the age of convergence. "BOC efforts to integrate voice and data services," Dooley asserted, "can not have the effect of locking out ISPs."

CLEC

It is a reality that ISPs as information services under the Telecommunications Act do not have the rights that telecommunication carriers have for unbundled network components, interconnection agreements, and co-location. Competitive Local Exchange Carriers (CLECs) on the other hand have these rights. ISPs and CLECs are forming business relationships. According to Dooley, "CLECs are very important to our industry and CIX will support the development of a regulatory environment that supports them." CIX filed a petition with the FCC earlier this fall in support of the right of CLECs to collect charges from the LECs for terminating dial traffic to ISPs.

Universal Service

Senator Stevens (R-AL), chairman of the Senate Appropriations Committee, has been agitating to remove the ESP exemption from Universal Service Funds. He is drafting an amendment to the FCC appropriations bill HR 2267, directing the Commission to undertake a review of its implementation of the 1996 Communications Act relating to universal service with particular reference to definitions. Sen. Stevens has also delayed consideration of the Senate Commerce Committee of S. 442, the Senate version of the tax moratorium bill, contending that enhanced services are telecommunications services and that enhanced service providers should contribute to the universal service fund through local access payments.

Former Bell Labs Chief Economist Ed Zajac points to a broader problem. The Telecommunications Act of 1996, requires that advanced services be "affordable", a term that has no regulatory or statutory history. As the market for telecommunications services becomes more and more deregulated, the FCC will find it more and more difficult to dictate affordability even if they can reach consensus about what should be affordable.

The FCC was required by Congress to set up a specific $2.5 billion fund to subsidize access to Internet and advanced telecommunications by schools and hospitals. ISPs have been given the right to compete for these opportunities. (For more information on how ISPs can apply for these funds see <http://www.cais.net/cannon/usf>) CIX will be monitoring whether independent ISPs are being treated properly in the bidding and contracting process for Internet services.

Conclusion:

During 1998, many of the most important battles regarding the Internet will be played out at the State level before the Public Utility Commissions (PUC). Not only will the PUCs determine what ISPs can expect from LECs. The PUCs will also create the environment that will determine the viability of CLECs and their ability to service the needs of ISPs. Dooley points out that the convergence of voice and data is based on the complex interaction of technology, tariffs, and policy. The FCC's Information Service and Access Charges NPRM as well as its Further Notice on CEI have the potential to impact this complex process and help determine the viability of the ISP industry. ▼

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The ITU Vision of the GII

by Will Foster

The International Telecommunications Union (ITU) has created a new series of recommendations aimed at standardizing the technologies that will underpin what the ITU is calling the Global Information Infrastructure. These Series Y Recommendations, as the new standards are called, are the result of a Sept. 1997 meeting of Study Group 13 of the ITU's Telecommunication Standardization Sector.

The GII recommendations seek to define how a multiplicity of existing capabilities will interwork in the context of a 'federation of networks'. Recommendation Y.100 does raise specific concerns about how IP as a connectionless protocol with unguaranteed QoS is moving into the same spaces traditionally occupied by PSTN/ISDN. One of the recommendation's goals is to facilitate the coexistence of OSI/CLNP and the IP protocols. However, its scope is much broader and potentially includes all the capabilities involved in the convergence of networking and computing.

The core assumption that is being made is that there is only one Global Information Infrastructure. In this vision, the role of the ITU is to coordinate with other standards development organizations (SDOs) to develop interfaces between all the different capabilities. "The ITU can manage the puzzle, bring the players together, seek out agreement on work flow complete with mapping to each others groups and cross referenced standards and specifications, all geared toward solving the bigger/macro goal of standards for the GII."

Y.100 dismisses the possibility that there could or should be multiple competing Global Information Infrastructures. It also demonstrates a clear preference for Standards Development Organizations over market driven standards processes. Exactly, how important this GII standards process will play in the convergence of the computer, telecommunications, and entertainment industries has yet to be seen. "Our members will choose whether to support, fight, or ignore this effort by the ITU," stated CIX Executive Director Barbara Dooley, "but CIX will continue to watch and report on the process."

T1S1, the group under the ANSI umbrella which has responsibility for network architecture standards, is coordinating with the US delegation to the ITU. T1S1 has an Ad Hoc Group working on National Information Infrastructure (NII) standards for the U.S. as well as the GII recommendations. ▼

Access Charges And FCC NPRM

FCC Activity Update

by Will Foster

The US Court of Appeals for the Eighth Circuit granted a motion to allow CIX to appear as amicus curiae (friend of the court) in the Court's review of the FCC's Access Charge Order (97-158). The Access Order, which was issued last spring, among other things exempted ISPs from having to pay time sensitive access charges to the LECs. Several RBOCs have asked the Court to overturn the FCC Access Charge Order, potentially exposing ISPs to time sensitive access charges.

CIX will file its brief on December 29, 1997 and the Court will hear the case in mid January.

CIX is also waiting for the FCC to release its proposed Notice of Proposed Rule Making (NPRM) on Information Services and Access Charges. Though the NPRM was expected in December, the FCC may choose to wait for the Eighth Circuit to make its decision. ▼

FCC Update

Rules and Rulings

As 1998 roles around, the meaning of the Telecommunications Act of 1996 is still being worked out by the Courts, the Federal Communications Commission and Congress. The rules for access charges, universal service fund, interconnection, and BOC entry into long distance are all under review.

ACCESS CHARGE REVIEW

On December 26, 1997, CIX filed an Amicus Curiae (Friend of the Court) Brief in the Eighth Circuit Court of Appeals regarding the Court's review of the Federal Communication Commission's (FCC) Access Charge Order. CIX's brief, which is available at the CIX website <http://www.cix.org>, states that the FCC is right in not applying existing long distance access changes to the Internet because such charges were designed specifically as a response to the historical evolution of long distance telephony and are not appropriate for the Internet. The physical infrastructure and technology of the Internet are different than the model on which long distance access charges are based. Applying an inappropriate regime could have significant negative consequences. The FCC, CIX added, has wisely chosen instead to rely on competitive forces to encourage efficient access solutions.

Referring back to the FCC's Computer II decision, the CIX brief points out the long history of treating enhanced service providers as separate from telecommunications carriers. Congress, in the Telecommunications Act of 1996, reinforced this separation with its distinction between telecommunication carriers and information service providers. Under the Act, ISPs are clearly information service providers. Congress and the FCC have had no intention of imposing the obligations of common carrier regulatory status on those participating in the free market for Internet services.

The RBOCs, in petitioning for this review, have argued that ISPs do not adequately compensate them for use of their network. CIX, in response, points out that ISPs do pay for the cost of the local exchange through the imposition of SLC charges and interstate tariffed rates. In fact, the RBOC's revenues have increased as a result of end users buying second lines from the RBOC's to access the Internet.

CIX concluded its brief by commending the FCC for its decision that is "...wholly in the public interest to preserve the vibrant Information and Internet industry without imposing a new set of federally mandated charges."

REPORT TO CONGRESS ON UNIVERSAL SERVICE

Senator Ted Stevens (R-Alaska) managed to have inserted in the 1998 appropriations legislation for the Department of Commerce, Justice, and State, a requirement that the FCC undertake a review of the implementation of Universal Service. Stevens and a couple of Senators from other rural states believe that ISPs should be required to directly contribute to the universal service fund (USF). As part of its review, the FCC has requested comments from the public.

CIX plans to participate in the FCC's proceeding and will argue that ISPs should not have to pay a portion of their revenue into the USF. Congress intended that only telecommunications carriers support the USF. The FCC has consistently ruled that information service providers are not telecommunication carriers.

According to CIX Executive Director, Barb Dooley, "turning ISPs into telecommunication carriers solely for the purpose of getting them to contribute more to the USF is contrary to the public interest." CIX will aggressively fight this effort.

CIX also points out the ISPs are in fact already indirectly contributing to the USF when ever they purchase telecommunications services, because the a USF charge is already being levied on those services.

Because the Joint Board ruled that ISPs are eligible for subsidies to support advanced services for schools and libraries, there are some that argue that ISPs should have to contribute to the fund as well. This view makes little sense because non-carrier ISPs pay indirectly into USF as end-users of telecommunications. In addition, CIX believes that efforts to exclude ISPs from competing for the school subsidies contradicts the plain statutory mandate for "competitive neutrality."

> ***"ISPs as enhanced service providers should not have to pay a portion of their revenue into the Uinversal Service Find . . ."***

ENTRY INTO LONG DISTANCE

In regards to another part of the Telecommunication Act, the US District Court in Texas ruled that the Act unfairly discriminates against regional Bell operating companies that want to offer long-distance services. In his finding Judge Kendall wrote, "the functional reality of the provisions [in the Telecommunications Act] is that they serve as punishment for the Bells' presumed anti-competitive conduct. Congress independently has adjudicated the Bell guilty of antitrust violations." Since the conditions that impact the Bell Operating Companies' ability to offer long distance also impact their ability to offer interlata Internet service, CIX is watching the development of this

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FCC Update *continued from page.*

case. The FCC has appealed the ruling and argues that the court's ruling only applies to US West and SBC Communications, the two companies that brought the case to trial.

RECIPROCAL COMPENSATION

In another development in Texas, an arbitrator for the Public Utility Commission has argued that calls to ISP are interstate and thus CLECs servicing ISPs are not subject to reciprocal compensation from the LEC. In making this decision, the arbitrator is differing with the interpretations rendered in nine different states that calls to ISPs were subject to reciprocal compensation. The decision is being appealed to the full Texas Public Utility Commission. CIX Executive Director, Barb Dooley predicts that defending the rights of CLECs that service ISPs will continue to be a major issue for CIX in 1998.

INTERCONNECTION ORDER

Finally, the U.S. Supreme Court has decided to expedite its review of the decision of a Federal appeals court to strike down key provisions of the FCC's 1996 "carrier interconnection" order. If the Supreme Court decides to hear the case, arguments would be held this summer. The case would have had little chance of being reviewed until the fall if the high court had not expedited the case. Though the interconnection order does not apply directly to ISPs, the presence of national interconnection requirements may speed the development of competition in the market for local exchange services. ▼

Will Foster contributes on policy and regulatory issues for CIX.tra

FCC UPDATE

A Review of New Proceedings

by Will Foster

CIX is currently developing responses to the FCC's Computer III Further Remand Proceedings and Bell Atlantic's Petition seeking regulatory relief from "restrictions impeding its expansion and offering of high-speed, packet-switched data services including Internet services..." Given the potential impact of the Bell Atlantic petition on ISPs, CIX requested and received an extension of the comment period to April 1, 1998. Ameritech and US West have since filed petitions similar to Bell Atlantic's.

The FCC is in the process of re-evaluating the rules under which the BOCs can offer Internet and broadband services. Bell Atlantic jump started the process by petitioning the FCC to permit it within 90 days to "provide high-speed broadband services without regard to present LATA (local access and transport ara) boundaries. In making this request, Bell Atlantic is asking to short circuit the competitive checklist that it must meet before it can offer interLATA services.

Bell Atlantic also proposed that the FCC permit it to develop high-speed broadband services, "including all xDSL (digital subscriber line) services, free from pricing, unbundling, and separations restrictions designed for voice calls."

Executive Director Barbara Dooley stated that, "CIX considers this petition to threaten the very viability of many in the ISP industry. The real danger is that the Bells will bundle Internet service with DSL service in such a way that ISPs are literally left out of the loop."

Part of the problem is that the Telecommunications Act of 1996 does not explicitly address whether the BOC's broadband networks and enhanced services provided over them should be regulated differently than enhanced services offered over POTS (plain old telephone service). The Act lumps both broadband networks and POTS together under the term "telecommunications". The Act also left the FCC in charge of deciding what to do with its regulatory safeguards for BOC provision of enhanced services that were developed under the Computer III proceedings.

On January 29, 1998, the FCC released the Computer III Further Remand Proceedings. These proceedings seek to re-evaluate the Computer III proceedings in light of the Telecommunications Act of 1996 and the evolution of the BOC networks.

"CIX considers this petition to threaten the very viability of many in the ISP industry"

The proceedings propose that the non-structural safeguards regime be applied to the BOCs provision of intraLATA information services (which include intraLATA access to interLATA Internet service). However,

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FCC Glossary

Computer III
FCC proceedings that permitted BOCs to offer enhanced services on an "integrated" basis subject to meeting CEI and ONA requirements.

CEI - Comparable Efficient Interconnection
A regulatory regime where BOCs must present a plan that demonstrates that other enhanced service providers have access to the carrier's services in a manner that is effectively equal to in quality, but not necessarily identical, to the access the carrier itself uses to produce enhanced services

Enhanced Services - Term developed by FCC for services that build on basic services. The Modified Final Judgment Court and the Telecommunications Act of 1996 use instead the term "information services".

ONA - Open Network Architecture
An FCC regulatory regime that was designed to provide enhanced service providers with equal access to network components at tariffed rates and conditions. Has up to this point been used primarily by the telephone messaging industry.

Structural Separation
A regulatory strategy embodied in Computer II (later overturned in Computer III) in which the BOC is allowed to participate in enhanced services if it does so through a structurally separate subsidiary. The Telecommunication Act imposed structural separation requirements on InterLATA and some information services such as electronic publishing.

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FCC Update *continued from page*.

the proceeding recommends elimination of the requirement that BOCs file Comparably Efficient Interconnection (CEI) plans. The proceedings propose that the Open Network Architecture (ONA) safeguards should continue to be used.

The ONA regime has been used by enhanced service providers such as the telephone messaging industry to gain access to network services such as stutter dial tone. Though it is conceivably possible for ISPs to use the ONA process, ISPs have not needed the BOCs to unbundle parts of POTS. As the BOCs enter the Internet and broadband market, ISPs have to evaluate whether the ONA process provides sufficient safeguards for competing against BOCs who are offering Internet services.

Over the past two years, many of the BOCs have filed CEI plans for their Internet offerings. CIX has used the CEI process to comment on plans such as that issued by Southwestern Bell Telephone that have not given customers a choice over what InterLATA Internet provider they use when they access the Internet through SWBT Internet Services. It is not entirely clear what is an acceptable CEI plan for BOCs offering Internet service over xDSL. If the BOCs bundle Internet service with xDSL, will they have to allow customers to choose their ISP on the fly as is done in Singapore?

The FCC is considering holding Section 706 hearings on how to promote advanced telecommunications services. In their petitions, the BOCs are arguing that they will be unwilling to invest in broadband services to the home if they will have to unbundle these services for competitors. It is possible that the BOCs and ISPs will be able to come to an agreement that encourages BOC investment in broadband networks while providing a level playing field for competition.

CIX in other FCC filings has commented on and offered reply comments on the Commission's Report to Congress on the Universal Service Fund (USF). CIX argued that the notion of treating some "information service" providers as "telecommunications carriers" for purposes of collecting USF funds is unwarranted. Second, subsidies for schools and libraries will primarily benefit the schools and libraries as intended, so it is best to allow the schools and libraries to choose among all market providers. Finally, the assertion that the proliferation of the Internet will result in insufficient contributions to the USF and harm the furtherance of universal service is entirely speculative as the advent of new technologies bring vast services to a broad range of Americans in a manner previously not possible. CIX's comments can be accessed at <http://www.cix.org>. ▼

Will Foster reports on developments in Policy and Governance for CIXtra.

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Universal Service Success

CIX Leads Successful Regulatory Effort

The FCC on April 10, 1998 issued its report to Congress on Universal Service that reaffirmed that ISPs are not subject to universal service obligations, the charges paid by long distance providers, or rate regulation.

"CIX is happy," stated Executive Director Barbara Dooley, "to have led ISP association efforts to encourage the FCC to retain the Enhanced Service Provider (ESP) exemption for ISPs and to not require ISPs to make direct contributions to universal service." She went on to caution that "the report is positive for industry, but it still does raise concerns that internet applications or ISPs could be included in future FCC regimes."

"CIX is happy to have led ISP efforts to encourage the FCC to retain the ESP exemption for ISPs..."

The fact that the FCC report cited CIX and other ISP associations more than six times points to the importance that ISP associations played in the development of the report. In addition to its filing of comments and reply comments, CIX filed two Ex Parte Letters. The April 3, 1998 Ex Parte letter which was cosigned by Coalition of Utah Independent Internet Service Providers (CUISP), the Internet Service Providers Consortium (ISP/C), the Mississippi Internet Service Providers Association (MISPA), and Western Regional Networks provided evidence that most ISPs are already spending 30 to 50% of their revenues on telecommunication costs and can ill afford any new telecom taxes.

The report was required by a rider offered by Senator Stevens (R-AL) to the FCC's Appropriations bill that required the FCC to analyze the definitions embodied in the Telecommunications Act of 1996 in terms of their impact on the Universal Service Fund. Senator Stevens has been quite outspoken in his belief that ISPs should directly contribute towards universal service.

Though the outcome was in doubt up to the last week, the FCC reported that the categories "telecommunications service" and "information service" on which the 1996 Act depends are mutually exclusive and consistent with preexisting definitions.

The FCC stated that its analysis of these important definitional issues reflects a consistent approach that will safeguard the current and furture provision of universal service to all Americans. Thus, the FCC found, in general, that continued growth in the information services industry will buttresss, not hinder, universal service.

The FCC stated that the transmission capacity to Internet sservice providers constitutes the provision of "telecommunications." As a result, telecommunications providers offering leased lines to ISPs constitutes the provision of "telecommunications." As a result, telecommunications providers offering leased lines to ISPs contribute to universal support mechanisms.

The FCC also examined the application of statutory definitions to various new services such as Internet telephony. Some forms of Internet

continued on page

Universal Service Success

continued from page

telephony require the use of POTS and employ IP in routing calls to their destination. The FCC observed that certain forms of phone-to-phone IP telephony lack the characteristics that would render them "information services" within the meaning of the statute, and instead bear the characteristic of "telecommunications services." The FCC, however, did not find it appropriate to make any definitive pronouncements in the absence of a more complete study in individual IP service offerings.

Finally, the FCC stated that its eligibility rules for USF subsidies, which include subsidies to ISPs who provide Internet services to schools, were consistent with both the language and spirit of the 1996 Act. ▼

Will Foster covers policy and governance issues for CIXtra.

Competitive Safeguards

CIX Files Five Comments on Competitive Safeguards

by Will Foster

CIX filed six separate comments with the FCC during the past month to ensure that ISPs can compete on a level playing field against the RBOCs. According to CIX Counsel Ron Plesser of Piper & Marburry, "the Bell companies are finally waking up to how important the Internet will be to their business, and they are relentlessly trying to use the FCC process to shape the rules to their advantage." Bell Atlantic, Ameritech and US West have all filed petitions arguing that high speed broadband services that they provide should be exempted from regulation.

"the Bell companies...are relentlessly trying to use the FCC process to shape the rules to their advantage."

At the same time, the FCC in Computer III Further Remand Proceedings have sought input as it re-evaluates the Computer III hearings in light of the Telecom Act of 1996 and the evolution of the RBOC networks. The proceedings propose that the non-structural safeguards regime be applied to the RBOCs provision of intraLATA information services (which include intraLATA access to interLATA access to interLATA Internet service). CIX in its comments on Computer III argues that there is a need for fundamental unbundling of RBOCs Networks. The FCC's 1995 Further Remand Proceedings demonstrated that anti-competitive conduct by the RBOCs is alive and well, to the detriment of the independent enhanced service industry and the public at large. This is exemplified by U.S. West's actions in 1997 to remove LADS service offering in 12 of its 14 in-region states exemplifies this anti-competitive content.

CIX in this new proceeding argues that the Open Network Architecture (ONA) requirements should be strengthened so that ISPs have access to unbundled network elements ("UNEs") including unbundled local loops. In addition, ISPs need the ability to collocate with the Local Exchange Carrier (LEC) in order to compete with ISPs affiliated with the RBOCs. If the ILECs do not have the space, CIX suggested that RBOCs establish a neutral and reasonably close space to the central office, i.e. a "collocation motel." Finally, CIX suggested that the FCC should apply a structural separations standard to all RBOC information services (both intra- and interLATA). An inherent conflict exists between an RBOC's motivations to sell network services to competing providers and the loss of retail RBOC business that occurs when competing providers ever the market. The solution is for the RBOC's network company to provide all ISPs the local network services to the end-user, including the RBOC's ISP-affiliate. With proper structural and ownership separations in place, the RBOC network company would have little inventive to discriminate against ISPs. CIX wrote "that this plan would greatly reduce discrimination against independent ISPs, and would provide the RBOCs with more genuine and clear incentives to improve local access for data users."

In the three petitions by the RBOCs, each argued that in order to invest in new broadband services such as DSL, they need the assurance that they would not be subject to InterLATA restrictions or requirements that they provide competitors with network elements at wholesale prices. All three argued that the Internet faces backbone capacity problems that can only be solved by giving the RBOCs these exemptions. CIX in response responded that there is no Internet backbone crisis and that the competitive nature of the ISP business ensures that there will not be. Measures should be taken to enhance not hinder the competitive nature of the ISP market.

Though the three petitions are similar, there are small differences. Ameritech in its petition presented a study that argues that Comparably Efficient Connection (CEI) plans that demonstrate that information service providers have the same access to the network as RBOC affiliated businesses are highly inefficient and have been shown to limit innovations. CIX responded that the study was flawed because it did not take in to account the innovations introduced by non-RBOC affiliated information service providers. US West in its petition stated that it needed exemptions so that it could provide DSL to "rural" users. CIX in its response pointed out that US West I already deploying DSL in forty cities without any exemptions. CIX also filed comments on the Alliance for Public Technologies petition that RBOC competitive safeguards be removed to facilitate deployment of advanced services. Once again, CIX argued that competitive safeguards work towards, now against, the deployment of advanced services. ▼

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BOC Replies

CIX Responds to BOC Petition

by Will Foster

The FCC received many comments on the petitions by Bell Atlantic, U.S. West, and Ameritech for exemptions from regulation for their broadband networks. The overwhelming majority of commentators including CIX opposed the granting of the petitions because it would be "contrary to Congressional and Commission law and policy, and will not further the provision of advanced services." CIX in its three filings argued that granting the petitions would eliminate competitive safeguards, eliminate effective access to telecommunications services, and significantly hamper competition that exists among Internet service providers.

"CIX in its three filings argued that granting the petitions would eliminate competitive safeguards..."

On May 6, 1998, CIX, in conjunction with the ISP associations from Arizona, Florida, Iowa, Mississippi, Texas, Utah, and Washington as well as ISP/C, filed reply comments with the FCC which addressed issues raised in the comments by other organizations on the three petitions. The full text of the reply comments can be found on the CIX server at http://www.cix.org.

In its reply comments, CIX and the other ISP associations criticized proposals such as one made by Compaq Computer Corporation that the petitions be conditionally granted in exchange for guarantees that the Bell companies will meet certain advanced service "build out requirements." Such "build out" provisions would, in theory, obligate the Bell Company either to provision a specific number of in-region ADSL enabled access lines or to offer ADSL services in a geographic region by a set timetable.

CIX opposes "build-out" schemes that fail to address the danger that BOCs will use their monopoly control over the local access market to dominate the data services market. CIX is also concerned that "build-out" schemes would be very difficult to enforce because it would be very difficult to penalize the BOCs without also penalizing their customers.

The FCC has not announced a timetable for consideration of the BOC petitions. By August 1998, the FCC is required by Section 706 of the Telecommunication Act to review its regulations in light of their support for advanced telecommunications to all Americans. Many observers believe that the FCC's response to the petitions will be part of the Section 706 review process.

During a speech of April 27, 1998, FCC Chairman William Kennard laid out a number of principles that will govern the Section 706 process. Kennard stated that the FCC wants to rely on competition to have advanced infrastructure deployed. Cable, wireless, and wireline technologies should all have a fair chance to bring broadband services to market.

ISPs should be concerned by Kennard's statement that he is "not afraid

continued on page

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BOC Replies

continued from page 1

of seeing wireline telephone providers have a first mover advantage." He did not explain whether adding DSL equipment to the local loop counted as "first mover" or whether he was referring to the deployment of new infrastructure such as fiber by the BOCs. Kennard did recognize that "where loops remain an essential facility, we also need to consider how that essential facility can be made available to other competitors as well."

Universal Service Fund Update

Though the FCC submitted its report on the Universal Service Fund (USF) to Congress, Senator Ted Stevens (R-Alaska) has continued to press the FCC on the issue. He introduced language into a Senate emergency appropriations bill that called on the FCC to report to Congress additional information including the expected contributions to the USF from incumbent local exchange carriers, interexchange carriers, information service providers, and commercial mobile radio service providers. The FCC will have a difficult time gathering information on ISP contributions to the USF, explains CIX Executive Director, Barbara Dooley, because contributions to the USF are paid by carriers who may or may not be passing these charges on to individual ISPs.

Senator Steven's language was not included in the final bill that was signed by President Clinton, but the Conference Committee report stated that the Committee expected the FCC to comply with the Steven's language. ▼

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FCC Update

by Will Foster

On September 14, 1998 CIX filed comments in response to the FCC's Notice of Inquiry (NOI) regarding the deployment of advanced telecommunication services. This review process was mandated by Section 706 of the Telecommunications Act of 1996 which required the FCC to investigate whether advanced telecommunication facilities are being deployed to all Americans in a reasonable and timely fashion. The NOI asks for definitions of advanced services and raises questions about the nature and competitiveness of the

"CIX believes that the FCC should open the ILEC networks so data services can flourish..."

"backbone market." It also asks how the Commission can ensure that independent ISPs are able to obtain efficient and competitively priced local transport services from incumbent LECs.

CIX's response built on the separation in the Telecommunication Act of telecommunication services from information services. Section 706 is clearly focused on telecommunication services and not information services and in no way should be seen as mandate to have the FCC get involved in information services such as the Internet. At the same time, Section 706 requirements should not be an excuse to bypass competitive safeguards to spur the deployment of advanced services. The BOCs made just such an argument in their petitions to the FCC earlier this year. In contrast, CIX argued that Section 706 "should be interpreted to work with the local competition provisions of the 1996 Act; the statutory provisions are not at cross purposes. Until a truly competitive local market exists, the Commission's mandates under Sections 706, 251, and 271 all lead to one concrete objective: open the incumbent local exchange carrier's (ILEC) networks so that local telecommunications for data services can flourish."

Until ISPs and users have options around the ILEC local network, the American consumer would benefit from ILEC regulation promoting ISP choice. CIX argues that consumers should not be steered to accept the ILEC affiliated ISPs and that all ISPs should be treated equally in terms of telecommunications service. It is also important to open up potential transport options for ISPs by allowing competitive access providers to interconnect with the ILEC high-speed data networks.

There has been some discussion on the NANOG mailing list over the questions posed in the NOI regarding the nature and competitiveness of the backbone market. CIX is very clear in its response to these questions in the NOI. "CIX does not believe it would be appropriate for the Commission to intervene into the dynamic relationship that currently exists between Internet providers; including not placing regulatory structures on aspects of the Internet market such as peering agreements and the provisioning of Internet backbone services."

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FCC Update

continued from page 1

Finally, CIX made the point that Universal Service Funding (USF) decisions can be made much more effectively once local markets are subject to competition. Premature USF decisions may only benefit the incumbent carrier and could serve to stifle competition for advanced services. The full CIX response to the NOI is available at www.cix.org.

NPRM

The FCC has also issued a Notice of Proposed Rulemaking to decide whether incumbent LECs can set up separate subsidiaries to avoid unbundling requirements. (see FCC Update, CIXtra August 1998.) The NPRM also explores the rules for co-location and unbundling of data applications. Responses to the NPRM are due September 27, 1998.

FCC RELEASES INTERNET OVER CABLE

The FCC has also issued a paper on Internet Over Cable: Defining the Future in Terms of the Past. The paper, written by the FCC's Office of Plans and Policy (OOP) examines the future of Internet regulation and provides an historical outline of how the FCC has regulated or not regulated various telecommunication services. "Integrated digital service offerings, such as those provided over the Internet, present fundamental problems to a regulatory framework dependent upon technological distinctions reflecting delivery of analog communications." The OOP suggests that the FCC may need new authority from Congress that will allow it to effectively target and forbear from targeting different niches. The report is available at http://www.fcc.gov/Bureaus/OPP/working_papers/oppwp30.txt

BELLSOUTH AND IP TELEPHONY

BellSouth announced on September 2, 1998 that it will no longer provide local exchange service to companies providing long-distance telephone service via the Internet. Under BellSouth's new policy, these companies will have to use one of BellSouth's access services and Bell South will treat these companies as regular long-distance carriers. BellSouth believes that it is acting in accordance with the criteria set out by the FCC on April 10, 1998 as to when IP telephony qualifies to be treated as long distance voice. The FCC's criteria that BellSouth cited included:

"(1) the service holds itself out as providing voice telephony or facsimile transmission service;

(2) the service does not require the customer to use Customer Premises Equipment (CPE) different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network;

(3) the service allows the customer to call telephone numbers assigned in accordance with the North American Numbering Plan, and associated international agreements; and

(4) the service transmits customer information without net change in form or content."

AN ALTERNATIVE APPROACH

In striking contrast to BellSouth's approach, Bell Atlantic Corporation is adopting a more cooperative strategy. In September, Bell Atlantic and IXTC Corp signed an agreement under which Bell Atlantic will provide a "gateway service" for ITXC's IP telephony traffic terminating in the New York metropolitan area. Bell Atlantic becomes the first RBOC to accept calls in IP format rather than traditional circuit-switched format. Under the new agreement, inbound calls will be translated into traditional voice format and completed over Bell Atlantic's local network. ▲

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FCC Update

by Will Foster

On September 25, 1998 CIX filed comments in response to the FCC's Notice of Proposed Rulemaking (NPRM) on Advanced Services (see www.cix.org). At its meeting in August the FCC had proposed that ILECs could escape the resale and unbundling requirements for their provision of advanced services if they provided those services through a separate affiliate. The NPRM asked for comment on this plan and on various changes to the federal rules for collocation and loop unbundling (see August 1998 *CIXtra*).

"CIX urged the FCC to ensure that in the process of encouraging the local telecommunications market does not impair competition in the Internet market."

The NPRM sets forth two routes for incumbent local exchange carriers ("ILEC") to enter into advanced services: the integrated approach and the separate affiliate approach. CIX urged the FCC, no matter which approach it took, to ensure that in the process or encouraging the local telecommunications market does not impair competition in the Internet market. CIX argued that a "truly" separate affiliate approach is far preferable to an integrative approach where the ILEC's sell voice and high speed Internet service as one package.

For a separate subsidiary approach to work there must be true telecommunications competition.

CIX urged the Commission to adopt collocation and unbundling rules that improve CLEC's ability to compete in local telecommunication markets. "The Commission's goal in this proceeding," wrote CIX, "should be to make the terms of collocation and unbundling so clear that the days of ILEC stymieing are over." CIX fully supports ALTS position that CLECs should be permitted to collocate cost-efficient equipment, including switching and multiplexing equipment. When virtual colocation is necessary, the ILEC should provide competing providers with space that is of close proximity to the central office facility.

In order to deal with the competition for colocation space, CIX proposed that the ILEC-affiliated CLEC should not be permitted equal space unless there are all ready three independent CLECs colocated. If there are not three, then the ILEC-affiliated CLEC should be removed if necessary to provide new entrant competition into the market. In addition, collocation space for DCAPs should be given highest priority.

ILECs, argued CIX, should also be required to provide CLECs with unbundled local loops so that the CLECs can provide xDSL. In addition, ILECs should be required to allow CLEC data and ILEC voice service on a single loop. If the ILEC cannot do that, then it should not be allowed to offer voice and data service on a bundled basis either. CIX also argued that if the ILEC or its affiliate uses a remote terminal to provide xDSL service then other CLECs should be allowed to use the remote terminal also.

continued on page

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FCC Update *continued from page 1*

CIX called for swift enforcement of the FCC's rules on advanced services by including all advanced service issues from ISPs and CLECs to its accelerated complaint process. In addition, CIX urged the FCC to develop public performance standards on a state-by-state basis of ILEC service and product provisioning to ISP and CLEC competitors.

"CIX is concerned about these cases because they raise the question of whether ISPs should be treated as interstate carriers and responsible for paying access charges..."

CIX also agreed with the FCC's tentative conclusion that the wholesale resale obligations of Sec. 251 (c)(4) of the Act apply to "any telecommunications service" sold at retail by the ILEC to non-telecommunications carriers. In other words CLECs should have the option of purchasing xDSL service at wholesale rates for resale. Finally, CIX argued that the Commission should not adopt modifications to LATA boundaries to allow RBOC's to engage in interLATA communications to Internet NAPs.

According to CIX Legal Counsel Mark O'Connor of Piper and Marburry, the FCC will probably issue an order based on the NPRM in January or February of next year. It is too early to tell what conclusions the FCC will reach, but they will likely be in the general direction of tentative conclusions that the FCC drew in the NPRM. There were no great surpises in the responses to the NPRM. ILECs opposed the separate affiliate plan as unnecessarily burdensome. Interexchange carriers (IXCs) and competitive local exchange carriers (CLECs) said the FCC lacked authority to allow the telcos to escape the resale and unbundling requirements.

After filing its comments, CIX is continuing to work with its allies to convince the FCC to strengthen its protections for ISPs and CLECs. "CIX" according to CIX Executive

continued on page

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FCC Update

continued from page

Director Barbara Dooley, "is working with ALTS, other associations, CLECs, and IXCs to develop a consistent message that the way to achieve residential broadband is to support innovation and competition by CLECs and ISPs." O'Connor expects there to be additional proceedings based on some of the issues raised in the Advanced Services Notice of Inquiry (NOI) (see September 1998 *CIXtra.*) Though the focus is currently on residential bandwith, some observers believe what is at stake is control over the home business and small business market. Given the importance of this sector to the health of so many ISPs, it is essential that the FCC strike the right balance in regard to ILEC entry into advanced services.

DIRECT CASES

Last month CIX commented on three "Direct Cases" filed by Bell South, Pacific Bell, and GTE. (This filing is also on the CIX Web site.) These tariff investigation proceedings raise questions at to whether: (a) the ADSL service used by Information Service Providers ("ISPs") are jurisdictionally interstate; (b) the services should be tariffed at the state or federal level; and (c) the Commission should defer to the state tariffing process to minimize the possibility of a "price squeeze" on competitors.

CIX is concerned about these cases because they raise the question of whether ISPs should be treated as interstate carriers and, as a result, be responsible for paying access charges. The Commission has ruled in the past that ISPs should not pay access charges because they do not use the network in the same manner as IXCs and it is a policy goal to promote a vibrant ISP industry.

To keep the Commission's policy consistent, CIX recommended that the Commission retain jurisdiction over the ADSL services only if the ILECs also file state tariffs for its ADSL service. ▲

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FCC Update

by Will Foster

One of the major topics of discussion at the National Association of Regulatory Commissioners (NARUC) Convention in Orlando, Florida was the recent ruling by the FCC that GTE's xDSL (digital subscriber line) service should be regulated as an interstate offering. There was significant concern about the implications of this ruling for CLECs who terminate calls to Internet Service Providers. Twenty-four states have ruled that calls to ISPs are local calls and that CLECs that terminate such calls are entitled to reciprocal compensation from the incumbent telcos.

> *"CIX is actively involved in the reciprocal compensation issue because the health of the CLEC industry impacts the viability of the ISP industry"*

In its October 30th, 1998 GTE ruling, the FCC said that it applied its long-standing rule on dedicated 'special access' lines that carry both interstate and intrastate traffic. Under this rule if lines carry more than 10% interstate traffic then they should be tariffed at the federal level. Because the calls made by consumers to ISPs that subscribe to GTE's DSL service are likely to terminate at Internet Web sites in other states or countries, the FCC ruled these communications are interstate in nature.

The FCC said that this decision did not apply to the jurisdictional nature of traditional dial-up Internet traffic. It said the reciprocal compensation matter is different from the DSL issue because it involves "examination of a separate body of FCC rules and precedent regarding switched access services; the applicability of any rules and policies relating to intercarrier compensation when more than one local telephone company transmits a call from a customer to an ISP; and the applicability of interconnection agreements entered into by [ILECs] and new entrants that state commissions have found, in arbitration, to include such traffic."

When it released the GTE ruling, the FCC said that it would follow with its decision on reciprocal compensation within a week. However, the Commission decided to gather feedback at the NARUC convention before releasing its decision. William E. Kennard, the Chairman of the FCC, presented a speech at the convention about the Internet. In that speech he made clear that the "FCC is not about to impose per minute charges on the Internet." On the issue of reciprocal compensation, Kennard stated that "Parties should be held to the terms of their agreements, and if a state has decided that a reciprocal compensation agreement provides for the payment of compensation for Internet-bound traffic, then that agreement and that decision by the state must be honored." Kennard, on the other hand, spoke of national interests and warned against legitimate interests being used "to divide us as we pursue our mutual and consistent goals."

Some observers believe that the FCC will try to finesse this issue by

continued on page

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FCC Update *continued from page 1*

claiming domain over Internet calls, but deferring to the states on reciprocal compensation decisions. CIX Counsel Mark O'Connor of Piper Marburry suspects that the FCC may issue a Notice of Proposed Rulemaking (NPRM) as part of its reciprocal compensation decision.

"the FCC should eliminate market uncertainty by reafffirming that the traffic to and from ISPs is not subject to per-minute access charges"

The NARUC board voted to approve the resolution calling for the FCC to review its GTE DSL order. The resolution states, "The traffic over the Internet is jurisdictionally mixed and the jurisdictional nature of the traffic may be discernible in the future." It goes on to say, "States are primarily concerned that they retain authority and resources to fulfill their obligations to regulate core facilities and services and to promote deployment of advanced services." The resolution calls for federal-state cooperation.

CIX submitted an Ex Parte Letter stating that the reciprocal compensation "decision provides the Commission with an opportunity to reaffirm the treatment of ISPs under the interstate access charge regime and to hasten competition at all levels of the advanced services markets." CIX argued that the FCC can promote a competitive Internet access market by maintaining three principles. The first is that incumbent LECs and CLECs should compensate each other pursuant to the negotiated interconnection agreements in effect. If the Commission applies its GTE DSL rationale to dial-up access arrangements, then such modifications should apply on a prospective basis only. Second, the FCC should eliminate market uncertainty by reafffirming that the traffic to and from ISPs is not subject to per-minute access charges. Third, competition between CLECs and incumbent LECs should be one of the FCC's highest priorities, in order to promote efficient local access services for ISPs. "The Commission should make clear that incumbent LECs may not impede competitive CLEC offerings to ISPs by charging interstate access charges for calls originating on the incumbent LEC network which terminate at an ISPs via a CLEC offering."

Executive Director Barbara Dooley, who attended the NARUC convention, stated that "CIX is actively involved in the reciprocal compensation issue because the health of the CLEC industry impacts the viability of the ISP industry and because we do not want to see access charges imposed on either ISPs or on CLECs." ▲

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FCC UPDATE

by Will Foster

During 1999 many of the ground rules for deploying advanced services were being negotiated and CIX has been very active before the FCC (see the article on CIX policy achievements starting on page thee of this issue). There have been some victories including the decision of the FCC to reform its enforcement division and to include an investigative unit. Given the fact that ISPs are often unable to collect the data they need from the BOCs to support their claims, such an investigative unit may make redressing ISP grievances easier. Also the new Joint Board on Advanced Services may be a good focal point for developing solutions to the problems that CLECs and ISPs face. The FCC's order on line sharing for providers offering DSL service was a victory.

There are some major unresolved rulemakings before the FCC. The FCC has still to issue an order regarding whether BOCs need to offer advanced services through separate subsidiaries. Nor has their been an order on BOC bundling of ISP services. CIX is also waiting for a response on whether full Comparably Efficient Interconnection (CEI) plans need to be posted by BOCs.

CIX and the Information Technology Association of America (ITAA) on November 29, 1999 filed a request with the FCC for an extension of the sunset date of the safeguards governing Bell operating company provision of In-Region, Inter-LATA Information Services. This sunset date is part of Section 272 of the Telecommunications Act of 1996.

CIX and ITAA requested that the sunset date for structural and behavioral safeguards be extended to February 8, 2002. The Telecommunications Act envisions a three-step process for opening interlata services. The first involves meeting a competitive checklist. The second involves a set of safeguards requiring the BOCs to offer their information services through a separate subsidiary. The third step involves the end of these subsidiary requirements. It has taken longer then anticipated for the BOCs to meet the competitive checklist. After February 8, 2000 those that meet the checklist can offer services such as Internet services without a separate subsidiary.

The FCC has the power under the Act to extend the safeguards to insure that there is enough competition in the local market to give service providers such as ISPs a chance to compete against the BOCs as the BOCs enter the ISP market. Though ISPs are currently reporting substantial abuses by the BOCs, these abuses can but only increase if the BOCs are able to offer Internet service directory and not through a subsidiary.

In its request, CIX and ITAA documented some of the difficulties ISPs have had in obtaining DSL-conditioned lines. They also pointed out that the BOCs have unlawfully bundled advanced telecommunications services with information services and customer premise equipment. There is clear evidence that the BOCs will use their monopoly power to extend their dominance to advanced services. Since it is competition that has been responsible for the growth of the Internet, it is essential that this competition be encouraged if advanced services our to flourish. The FCC needs to give structural separation the time to work.

> **"The FCC has the power to give service providers such as ISPs a chance to compete against the BOCs"**

Bell Atlantic is filing a Section 271 request to be allowed to provide long distance service in New York. In their application, they propose using an affiliate to provide DSL. CIX and others are concerned that an affiliate does not involve the type of structural separation that is needed to protect ISPs and will be filing comments to that effect with the FCC. ▲

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FCC UPDATE

by Will Foster

CIX has been part of four important developments at the FCC. In December CIX petitioned the FCC to require the Bell Operating Companies to post copies of comparably efficient Interconnection plans. CIX has also supported the formation of an FCC team to ensure that RBOCs comply with local market regulations. In addition, structural separation for the RBOCs and VoIP have been extremely important issues for the ISP community.

"BOCs must now post a complete copy f all their CEI plans"

BOCS REQUIRED TO POST ALL CEI PLANS

On December 17, 1999, the FCC released an Order requiring Bell Operating Companies (BOCs) to post a copy of their existing - and new — Comparably Efficient Interconnection Plans and Plan Amendments. The FCC held that BOCs must post a complete copy of all their CEI plans — rather than merely a copy of "new or altered" plans. The FCC determined that "without such information, it would be difficult for Internet Service Providers (ISPs) to get information regarding plans filed with the Commission under the prior CEI regime."

In its petition, CIX also asked the FCC to require that incumbent ILECs disclose in advance — and via their websites — the planned deployment of digital subscriber line access multiplexers ("DSLAMs") on a wire-center basis, and provide adequate prior notice on the status of line conditioning for a given customer or group of customers. The FCC ruled that CIX's request, which would required an expansion of the network disclosure rules, was beyond the scope of the Computer III Further Remand Proceedings under which CIX filed its petition. The FCC did, however, reemphasize the following points regarding the ILECs' network disclosure obligations:

- Section 251 (c)(5) requires that the ILECs, at a minimum, disclose "complete information about network design, technical standards and planned changes to the network";
- A carrier's failure to disclose network information that enables other entities to interconnect to the carrier's telecommunication facilities and services in a just and reasonable manner would constitute a violation of Section 201 of the Act; and
- The BOCs are still subject to the Commission's Computer III rules, which require that they provide ISPs nondiscriminatory access to BOC telecommunication services.

Though the FCC found that information disclosure on DSLAM deployments was beyond the scope of the proceeding, ISPs should be encouraged by the FCC's reiteration that failure to disclose network information that enables other entities to interconnect to the carrier's telecommunications facilities and services violates the Act

continued on page

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FCC Update continued from page 1

STRUCTURAL SEPARATION

CIX has filed comments and reply comments to the FCC requesting that the structural and other safeguards contained in Sections 272 of the Telecommunications Act of 1996 safeguards be extended till February 8, 2000. These safeguards require BOCs to offer inter-LATA information services through a separate subsidiary once the BOC obtains section 271 approval allowing them to provide inter-LATA information services. Such records can be used to see whether BOCs are treating affiliates differently than competitors in terms of the provision of telecommunication services. If structural separation requirements expire, the default protections of Computer III which are more limited in their nondiscriminatory provisions will apply.

In its reply comments, CIX points out that these safeguards are particularly needed to insure a competitive broadband market, "The BOCs will have the anti-competitive incentives and the means to exclude competitors from tomorrow's broadband market because of ongoing control over the local exchange." Given the documented record of BOC discrimination faced by competitors offering DSL services, CIX called on the FCC to extend the safeguards for another two years so that the effects of BOC entry into broadband can be measured.

ENFORCEMENT TEAM

In the wake of the Commission's recent approval of Bell Atlantic's application to offer long distance service in New York, the FCC has established a team to insure that BOC's continue to comply with the local-market-opening conditions they are required to satisfy in order to gain entry to the long distance markets in their respective states.

The primary functions of the new enforcement team are

- to review complaints and other information from interested persons regarding post-grant "backsliding" by BOCs who applications are approved;
- to undertake or recommend swift and effective enforcement action where appropriate; and,
- to act as the point of contact within the FCC for persons wishing to provide information regarding possible "backsliding" by BOCs.

According to CIX President Barbara Dooley, CIX will be spending a considerable effort on enforcement to insure that the FCC learns of and acts on BOC anti-competitive behavior in the ISP and broadband markets.

VOICE OVER IP AND SECTION 255

Also in January, CIX sent a letter to the FCC urging that Voice over the Internet (VOIP) not be classified as a telecommunications service. The FCC issued a Further Notice of Inquiry (NOI) that determined that VOIP and other advanced services should not "leave people with disabilities behind." The NOI was in keeping with Section 255 of the Telecommunications Act of 1996.

CIX opposes any effort to classify VOIP or any other IP service as a "telecommunications" service because of the potential that the FCC would regulate the Internet under its common carrier regime.

Some responders to the original NOI called for classifying VOIP as a telecommunications service in the interests of making it more accessible to the handicapped. CIX fully supports the goals of section 255 of the Communications Act to make advances services available to all. CIX believes that consumers, including persons with disabilities, are best serviced by the continued, unfettered development of advanced information services. ▲

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FCC Report

A Disappointing Decision

By Will Foster

On February 7, 2000 the FCC ruled against the petition by CIX and the Information Technology Association of America (ITAA) to extend the sunset date of the Telecommunications Act of 1996 requirement that Bell Operating Companies (BOCs) use a separate subsidiary to offer in-region interLATA information services. The separate subsidiary requirement which required separate bookkeeping for a BOC ISP, provided a degree of transparency regarding the supply of BOC services to the subsidiary. CIX is very concerned that BOCs will be able to use their dominance over the local loop to give themselves an unfair advantage over ISPs who rely on the BOCs' local network facilities.

Many CIX members reacted strongly to the decision. "We're disappointed by the FCC's decision, and we're especially concerned that the FCC provided no explanation or reasoning in its order," said John LoGalbo, PSINet's Vice President of Public Policy. "Our best guess is that the FCC has concluded that the non-structural Computer III safeguards are enough to prevent anti-competitive behavior by the ILECs. The next step is for ISPs to hold the FCC to its promises of vigorous enforcement of the remaining safeguards."

"we're especially concerned that the FCC provided no explanation or reasoning in its order"

Because of the way that the Telecommunications Act of 1996 was written, many of the competitive safeguards in it only apply to telecommunication carriers with the requisite licenses and not to value added services such as ISPs. As the BOCs try to extend their dominance from the PSTN to new DSL services, there have been many instances of ISPs, who are competing against the BOCs, receiving inferior services or pricing. The Telecommunications Act of 1996 did have a provision in it prohibiting BOCs from offering Internet services until February 8, 2000. At the time it was written, it was assumed that the BOCs would have opened the local loop to extensive competition. Unfortunately, this competition has not materialized.

In its February 7th notice, the FCC was not responsive to the concerns that ISPs have been raising. It concluded "that the CIX/ITAA Petition does not provide a basis for the Commission to extend beyond February 8, 2000, pursuant to section 272(f)(2) of the Act, the structural nondiscrimination, and other behavioral safeguards contained in section 272 of the Act as they pertain to BOC provision of in-region, interLATA information services."

The FCC claimed that "there are several safeguards that will limit adequately BOC's ability to discriminate against nonaffiliated information service providers even after section 272(f)(2) takes effect." Unfortunately, the FCC neither specified the safeguards nor explored whether they would in fact protect value-added ISPs, especially those attempting to expand into DSL broadband services. It is most likely that the FCC was referring to its Computer III rules, which require that BOCs provide ISPs non-discriminatory access to BOC telecommunication services. It is not clear the Computer III rules provide the protections that ISP need to compete as the BOCs aggressively enter the DSL and ISP markets.

In a press release issued by CIX, the association stated its deep disappointment in the FCC's decision. CIX stated, "If (the BOC) campaign for relief from competition succeeds, the ultimate losers will be American consumers and American Internet leadership. As innovative Internet entrepreneurs are driven out by the RBOCs' financial might, there is a distinct possibility that we may lose their creative skills and imagination."

For ISPs who believe that they are not being offered by the same services and prices that the BOC affiliated ISP is getting or that they are being discriminated against in the provision of services, it is essential that these concerns be documented and brought before the FCC's enforcement bureau. ▲

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FCC Report

By Will Foster

ENFORCEMENT BUREAU

On May 4, 2000 CIX met with David Solomon, Chief of the FCC's Enforcement Bureau, to discuss how ISPs could work with the Enforcement Bureau to rectify situations where the Bell Companies and other incumbent Local Exchange Carriers (iLECs) are engaged in anti-competitive behavior. Such anti-competitive behavior may be violating the Telecommunications Act and other FCC rulings such as Computer III.

"Solomon laid out three different processes for bringing complaints against the iLEC."

Solomon laid out three different processes for bringing complaints against the iLEC. In one process, customers can fill out a form, available on the FCC web site, that enables them to file a complaint about the treatment they have received from the phone company. Though the form is primarily designed for customers who have concerns about long distance companies, it is generic enough to be used by ISP customers who have complaints and disputes with their phone company's behavior. The FCC then sends the complaint to the phone company. The phone company must respond to the customer in writing with regard to the customer's complaint. The FCC also sends a letter to the customer to see if they received an adequate response and to lay out the next step if they are not satisfied.

Businesses have the option of beginning a formal dispute process involving the FCC's Market Disputes Resolution Division. The formal process includes the use of the "Rocket Docket" to expedite formal complaints. However, use of the formal dispute mechanism by no means guarantees that a case will get on the FCC's "Rocket Docket". The use of the formal dispute process generally requires significant work by legal counsel hired by the complainant. Both sides remain free to settle the matter at any point in this process. The process may otherwise result in the imposition of forfeitures or fines on the carrier, as well as damages or specific performance awards to the complainant. Organizations, such as state and industry associations without standing in the case, can nevertheless bring a dispute to the FCC on behalf of its members through this process.

The FCC has also set up an informal process for resolving disputes with common carriers. A lawyer is not necessarily needed to utilize this process. An ISP who has a complaint should first call the Investigations & Hearings Division and discuss their problem. The ISP should be prepared to explain why they feel that the phone company or other party's action is anti-competitive or a violation of the FCC's rules. The Investigations and Hearings Division will let the complainant know what documentation will be needed if they feel the case has merit and is within the FCC's purview. Such documentation may be in the form of E-mails,

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FCC: News From the Enforcement Bureau continued from page 1

records of communications, or affidavits. The FCC will pursue the case as a function of its pursuit of the public interest. In appropriate circumstances, the FCC may impose fines of up to $110,000 for each violation, and potentially another $110,000 per day for continuing violations, up to a total of $1.1 million. No damages are awarded to the complainant under the informal process.

The difference between the informal and the formal process can be compared to the difference between having a lawyer represent you in a civil suit and having the district attorney prosecute your criminal complaint. In the first you have much more control over the process, but you must hire a lawyer. In the informal proceeding, much like a criminal complaint filed with the district attorney, you are spared the legal fees but you are not in control of the process.

SECTION 706

On April 4, 2000 CIX filed reply comments on the FCCs Second Notice of Inquiry into the deployment of advanced telecommunications capability pursuant to Section 706 of the 1996 Telecommunications Act. CIX urged the Commission to continue to implement Section 706 in a careful, thoughtful manner, guided by Congress's clear support for competition in the local telecommunications market, and the Commission's policy of "unregulation of the Internet." CIX wrote that "as long as ISPs, CLECs, and end-users lack real alternatives to the ILEC's local network facility, the Commission must ensure that ILECs do not leverage their dominance in the voice telecommunications market to capture the advanced telecommunications market."

CIX included in its response the New Networks Institute's Summary Report of the ISP Survey. The survey indicated that small ISPs are receiving substandard customer service from the ILECs. In addition, the New Networks Survey indicated that the majority of small ISPs in secondary and rural markets do not have a choice of service providers and are being squeezed out of the market by the ILECs' affiliated xDSL and ISP offerings.

> *"The FCC has also set up an informal process for resolving disputes with common carriers. . ."*

Residential and small business Internet users, in particular," wrote CIX, "are suffering harm as a result of the ILECs' intransigence with regard Sections 251, 271, and the FCC local competition regulations. Thus, in contradiction to the ILECs' arguments that the regulatory requirements of Sections 251 and 271 ultimately delay the widespread deployment of advanced telecommunications capability, the attached New Networks Survey indicates it is actually the ILECs' own behavior that frustrates the deployment of advanced telecommunications services to all Americans."

FCC ORDER ON LOCAL COMPETITION

On March 24, 2000 the FCC issued its rule on broadband reporting. It also introduced FCC Form 477 for reporting information. ISPs that resell broadband services that incorporate other providers' digital subscriber lines (DSL) do not need to file reports. Facilities-based broadband service providers must fill out the reporting form for any state in which they service 250 or more full or one-way broadband service lines, wireless channels, or customers.

Service providers must file their reports semi-annually. End-of-year data is due on March 1st of the subsequent year, and first half of year data is due on September 1st of the same year. In order to account for this data in the upcoming Advanced Telecommunications Report, however, the FCC is requiring service providers to file their end-of-year 1999 data on May 15, 2000. ▲

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ICANN Update

by Will Foster

On the 16th of July 2000 the ICANN Board of Directors met in Yokohama. There were no major surprises. The Board voted to proceed with the recommendations of the Names Council that it establish a policy for the introduction of new gTLDs in a measured and responsible manner. The resolution did not specify the number of new gTLDs but did establish the following schedule:

1 August 2000 ICANN to issue a formal call for proposals by those seeking to sponsor or operate one or more new TLDs.

1 October 2000 Deadline for ICANNs receipt of applications. Portions of these applications deemed appropriate for publication for purposes of public comment or otherwise will be posted on ICANNs web site.

15 October 2000 Close of period for public comments on proposals.

20 November 2000 After approval by the Board, ICANN to announce selections for negotiations toward entry of agreements with registry sponsors and operators.

31 December 2000 Target date for completion of negotiations.

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ICANN Update *continued from page [illegible]*

The Board authorized the collection of a USD $50,000 non-refundable fee to accompany a gTLD application to cover ICANNs costs of evaluating the application.

The Board amended the bylaws concerning membership including the clarification that four of the nine At Large Directors shall serve until the conclusion of the Annual Meeting of the Corporation in 2002. The five new At Large members shall be elected by the Membership. At Large candidates can either be nominated by the nominating committee or by a member nomination process. One At Large member will be selected from each of ICANNs five geographical regions. The Board also clarified that it would use the United Nations Statistics Division classifications for defining regions.

The Board spent a considerable amount of time at this board meeting also clarifying the member nomination process. Individuals must notify ICANN of her/his wish to be nominated by the membership by August 14, 2000. ICANN will provide a web page listing each candidate seeking nomination and will let the membership know on a weekly basis of candidates seeking nomination. Members will be able to indicate support for one and only one candidate to be nominated. There will only be up to seven candidates per region on the ballot which includes both the candidates nominated by the nomination committee and those nominated through the membership process.

By the time of the board meeting, over 50,000 people had signed up as ICANN members with two weeks to go. The member sign up system was designed with a much lower number of sign-ups in mind and many people have experienced trouble while trying to sign up in recent weeks. The board decided that it was not wise to try and make changes in the system at this late date.

In other matters, the Board approved a recommendation that it submit a proposal to the United States Department of Commerce for transition of the current root-server-system architecture to an enhanced architecture based on use of a dedicated primary nameserver operated by ICANN. The Board authorized ICANNs president to negotiate agreements with the root server operators regarding their operation of the root servers. The president was also authorized to negotiate agreements with the Department of Commerce regarding ICANNs managing the root-zone file. ▲

Will Foster writes on FCC and international issues for CIXtra

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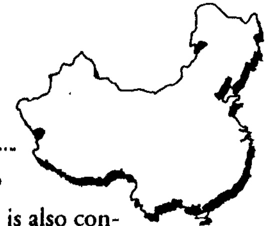
Exchanges, Competition and IPv6 in China



by Will Foster

In March of 2000, China established a Network Access Point or Internet Exchange. This exchange allows the country's nine authorized Network Service Providers (see table) to exchange traffic with each other at broadband speeds. Though there has been discussions about implementing an exchange since 1996, the realization of the exchange represents the maturation of China's two tier ISP policy.

In February of 1996 the Chinese State Council authorized four Network Service Providers to provide global connectivity. Other organizations were able to provide Internet service but they had to get their global routes through one of the Network Service Providers.

Though bilateral peering was established between the PTT China Telecom and the three other Network Service Providers in 1998, the connections were often overutilized and traffic had to be routed through the United States. China Telecom tried to push the other Network Service Providers into buying transit from it. Finally, however, under an agreement worked out by the Ministry of Information Industries (MII), China Telecom agreed to participating in an exchange under the condition that it could physically run it. Though run by China Telecom, the policies of the exchange are set by the participating members under the direction of MII.

"...the realization of the exchange represents the maturation of China's two tier ISP policy."

The Exchange is based on dual homed Cisco Gigabyte 6509 switches. Each Network Service Provider has a router at the exchange which connects to the switches at OC-3. The exchange is based on Layer 2 switching and bilateral peering.

Since 1996, there have been two commercial Network Service Providers (Jitong's ChinaGBN and China Telecom's China Net). Last year the State Council authorized the country's second telecommunication carrier China Unicom to become a Network Service Provider. Unicom is rapidly building out an IP network connected to fiber rings in 230 cities. The network is based on IP over ATM.

China Netcom (CNC) started out as the IP Network Model Project and is sponsored by the Chinese Academy of Science, the Ministry of Railways, and the State Administration of Radio, Film, and Television (SARFT). The Network based on IP over DWDM initially spans 15 cities and operates at 2.5 Gbps. China Mobile which has been formally separated from China Telecom is also building a nationwide IP backbone and is also connected to the exchange.

China is not only creating a competitive though controlled market, it is preparing for rapid growth. Under the belief that there will not be enough IPv4 address to meet China's projected needs, China's Education Network CERNET has a taken a leadership role in implementing IPv6. Not only has CERNET implemented IPv6 in its backbone but it has developed IPv6 network management tools, implemented video applications on IPv6, and created its own search engine for Web pages on IPv6. CERNET has also recently signed an agreement with Nokia to jointly conduct IPv6 research. The creation of a working exchange, the deployment of strong Network Service Providers, and CERNET's work with IPv6 are all signs that the year 2000 with be a pivotal year in the building of China's Internet.

China's Network Service Providers
(*original)

- China International Commerce Network (CIETNET)
- China Great Wall Network (CGWNet)
- China Mobile Telecommunications Network
- China Netcom
- China Science and Technology Network (CSTNet) *
- China Telecom's ChinaNet *
- China Educational and Research Network (CERNET) *
- Jitong's ChinaGBN *
- Unicom's Uninet

CIX On The Northpoint Merger

Concerns About Competition

By Will Foster

On October 2,2000 CIX filed comments to the FCC on the proposed merger of NorthPoint Communications with Verizon Communications. Specifically, the FCC requested comments on transferring NorthPoint's section 214 authorization to provide domestic interstate telecommunication services as a non-dominant carrier to a new non-dominant carrier that would be created by the merger of NorthPoint and the digital subscriber line ("DSL") businesses owned by Verizon.

While CIX does not oppose the proposed merger, and certainly welcomes increased competition in the broadband markets, it did express its concern that clarifications to the application were needed to ensure that the proposed merger did not lead to anti-competitive outcomes.

BIG DIFFERENCES

CIX pointed out that it was important to recognize the differences between the business DSL, residential DSL, and cable markets when assessing how the merger will both increase and stifle competition. CIX expressed its concern that supplier consolidation in the consumer DSL market could pose a serious threat to independent ISPs. These ISPs do not self-provision DSL for their customers that seek high-speed broadband access; rather they procure such service on a wholesale basis, and resell it to their customers. As a result of the proposed merger, NorthPoint will enter the market of wholesaling consumer DSL services to Verizon, which competes in the same market sector as independent ISPs. The proposed merger creates an opportunity for discrimination and anti-competitive behavior by North Point on behalf of its functional parent, Verizon. CIX warned that the FCC must take precautions in the proceedings to ensure that the opportunity for such behavior is minimized.

FCC CONDITIONS

On June 16, 2000, the FCC approved, subject to certain pro-competitive conditions, the merger of Bell Atlantic Corporation and GTE, facilitating the creation of Verizon. The Commission determined that, absent these conditions, which are similar to those the FCC adopted for the SBC/Ameritech merger, the merger of Bell Atlantic and GTE would not have been in the public interest because it would slow competition, enable discrimination against rival providers of advanced services, and increase the danger that collusive oligopolies would dominate the industry. These dangers created the need for additional regulation.

The FCC required Verizon to create one or more separate affiliates that would provide advanced services in the Verizon region. The FCC also identified certain structural and non-structural safeguards to prevent Verizon and its advanced services affiliate (ASA) from engaging in anti-competitive behavior. CIX asked that these conditions as described in the Bell

"CIX... did express its concern that clarifications were needed to ensure that a competitive market was preserved..."

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CIX On the Northpoint Merger *continued from page 7*

Atlantic/GTE Merger Order, apply to the relationship between Verizon and NorthPoint.

The Bell Atlantic/GTE merger order requires Verizon to spend $500 million to provide competitive local services outside the Verizon service region by June 30, 2003. CIX argued that the money that Verizon spends on the Northpoint deal should not be counted towards this requirement as it is not creating new services.

IMPORTANT TARIFFS

CIX also argued that North Point, as Verizon's ASA, should be required to maintain appropriate interstate advanced services tariffs with the FCC and with each state in which it operates. "This condition is extremely important to ISPs," CIX wrote, "since the existence of such tariffs are a critical means for ensuring that the New NorthPoint, as Verizon's ASA, will not discriminate in favor of Verizon. Essentially, by placing the rates, terms, and considerations of advanced services in the open, these tariffs will provide even the smallest independent ISP the information and means to ensure that it will receive non-discriminatory access to the new NorthPoint's services." ▲

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FCC's PROJECT PRONTO WAIVER ORDER

By Will Foster

On September 8, 2000, the FCC released the Project Pronto Order, granting SBC's request to waive certain conditions placed on it when the FCC approved its merger with Ameritech, and removing the FCC's prohibition on SBC's ownership of certain advanced services equipment except through an affiliate. This decision should be of interest to all US ISPs and CLEC's because it indicates the FCC's thinking about pro-competitive conditions. Some of these same issues arise in the Further Colocation NPRM on which the public can comment this month.

FCC SAFEGUARDS

On October 6, 1999, in the SBC/Ameritech Merger Order the FCC approved the merger of Ameritech and SBC. In the course of that proceeding, SBC and Ameritech proposed, and the FCC accepted with certain modifications, a set of conditions intended to counterbalance the anti-competitive potential of the merger. Among those conditions was a requirement that, after the merger, SBC may not directly provide advanced services, such as digital subscriber line ("DSL") service, or own advances services equipment, but may only do so through an "Advanced Services Affiliate" ("ASA").

Project Pronto is SBC's name for its $6 billion plan to deploy next-generation digital loop carrier ("NGDLC") network infrastructure to make DSL service available to 77 million customers, 20 million of whom do not currently have access to DSL service because they are served by network facilities that are incompatible with that technology.

In particular, SBC will construct an overlay network architecture utilizing optical fiber transmission between its central offices and remote terminals, NGDLC systems installed at the remote terminals, asynchronous digital subscriber line ("ADSL") line unit cards ("ADLU" or "plug-in" cards) that can be fit into the NGDLC remote terminals, and optical concentrator devices ("OCDs"), actually asynchronous transfer mode ("ATM") switches, in its central offices.

SINISTER IMPLICATIONS

Anticipating correctly that the FCC would find that the ADLU cards and OCDs it seeks to deploy in Project Pronto are the very type of advanced services equipment that it is barred from owning under the SBC/Ameritech Merger Order conditions, SBC requested that the FCC grant a limited waiver to permit SBC to own and deploy the ADLU cards and OCDs. SBC also proposed additional pro-competitive conditions to counter the potentially anti-competitive implications of its request.

NEW SAFEGUARDS

In the Project Pronto Order, the FCC adopted a modified version of these proposals as waiver conditions, as described below.

- SBC will provide a "Broadband Offering" which is a combination of network elements, including copper from the customer to the remote terminal, and a permanent virtual ATM over OC-3 rate circuit from the remote terminal to the central office, as a wholesale access arrangement.
- SBC will provide a "Combined Voice/Data Service Offering" that will utilize a voice loop from the customer to the central office main distribution frame ("MDF"), plus the fiber feeder and OCD facilities, to provide on a wholesale basis a combined voice and data solution for collocated CLECs.
- SBC will make available all existing and future features, functions, and capabilities of the advanced services equipment that it may collocate in remote terminals pursuant to the Project Pronto Order. In particular, SBC will make G.lite available for deployment by its ASA and CLECs within six months of vendor availability.

"The decision should be of interest to all US ISPs and CLECs because it indicates the FCC's thinking about pro-competitive conditions."

- SBC will offer a Special Construction Request ("SCA") process to accommodate requests for space in structures and remote terminal cabinets where space is not presently available, and to obtain access to the copper subloop and dark fiber.
- SBC will provide access to collocation in existing remote terminals in accordance with existing FCC subloop unbundling rules, except that space will be available in increments as small as a single equipment shelf, where available.
- SBC will deploy new huts and controlled environment vaults ("CEVs") so that approximately 20% of the space will be available for collocation. In response to a SCA, SBC will deploy new cabinets so that approximately 15% of the space that can be used to install equipment will be made available to CLECs.
- SBC will provide space for CLECs to collocate their own OCDs, or functionally equivalent equipment (ATM switches) to provide advanced services.
- SBC shall host collaborative sessions for all interested telecommunications carriers, vendors, and other industry members to address outstanding operational and technical issues regarding access to NGDLC architecture. Transcripts and summaries of such sessions will be publicly available. ▲

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FCC Issues Notice of Inquiry on "Open Access"

By Will Foster

On September 28, 2000 the FCC released its much anticipated Notice of Inquiry ("NOI") on "open access" to cable modem services by unaffiliated Internet Service Providers ("ISPs"). It is available at http://www.fcc.gov/Bureaus/Miscellaneous/Notices/2000/fcc00355.txt

In this NOI, the FCC inquires whether it should continue its existing policy of regulatory restraint for cable modem service in the context of a national policy framework for promoting deployment and competition in high-speed internet services. To accomplish this goal, the NOI:

"CIX will be filing a response to the open access NOI"

1. Seeks to develop a factual record regarding the services provided by cable operators and other high-speed platforms and the types of access sought by unaffiliated ISPs.
2. Seeks comment on potential approaches for classifying cable modem service and the cable modem platform and the implications of classifying cable modem service or the cable modem platform under each category. Should cable modem service be classified as an information service, a telecommunication service, both or neither?
3. Seeks comment on various issues related to multiple ISP access, including definitional issues and how market-based and regulatory approaches potentially affect the availability of high-speed services. This could include comments on how the FCC's market-based approach is working and evaluations of the merits of the AT&T - Mindspring agreement and the AOL-Time Warner Memorandum of Understanding. The NOI also specifically asks for the technical and operational meaning of "interconnection" as applied to unaffiliated ISP access to cable modem platforms. It also asks about the desirability of some form of mandatory access for ISPs to cable modem service.
4. Seeks comment on whether the FCC should pursue any further course of action such as exercising its rulemaking or forbearance authority.

According to CIX President Barbara Dooley CIX will be filing a response to the open access NOI. The deadline for comments is December 1, 2000 and reply comments in January 10, 2001. ▲

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FCC Report

By Will Foster

CIX on December 1, 2000 filed comments with the FCC regarding Open Access. The FCC on September 28 had requested comments on the issues surrounding high-speed Internet service, particularly that which is provided via cable modem services. As discussed in last months CIXtra, the FCC sought comment on a variety of legal and policy frameworks that might apply to cable. CIX in its comments recommended that the FCC continue to support reasonable, technically feasible, and commercially viable ISP access to broadband transmission facilities."

"CIX wrote that it strongly supports commercially viable ISP access to all forms of transmission capacity"

CIX wrote that it strongly supports commercially viable ISP access to all forms of transmission capacity and praised the FCC for its goals with respect to digital subscriber line (DSL) services. CIX recommended that the FCC continue to deliberately and closely monitor the deployment of broadband facilities, the establishment of competition, and the ability of consumers to access their preferred providers, including ISPs and carriers. CIX also cautioned the FCC that since ISPs are not communications common carriers, the FCC should not impose any regulations that will adversely impact ISPs.

For ISP choice to exist, CIX wrote, 1) consumers should be able to choose an independent ISP on terms that are competitive with those of carrier-affiliated ISPs, and 2) independent ISPs should be able to reasonably negotiate for commercially viable connectivity with broadband carriers. CIX believes that the FCC's vigilance has resulted in better behavior by industry participants and more ISP choice. CIX also believes that market forces may be harnessed to increase ISP choice and competitive access to broadband transmission facilities. CIX cited a Goldman Sachs analyst who recently observed that establishing open access would be likely to increase Time Warner's revenues, and help expand AOL's broadband service beyond the Time Warner system, setting a model for the rest of the cable industry.

CIX in its conclusion urged the "Commission to continue to maintain its vigilance and support for competition in the telecommunications markets. Such competition is fostered by promoting freedom of ISP and carrier choice for consumers, and will be further encouraged by adopting CIX's recommendations. By doing so, the Commission will help to ensure that local facilities are fully opened for competition."

Non-Accounting Safeguards

CIX on December 15th also filed reply comments to the FCC on implementation of the non-accounting safeguards of Sections 271 and 272 of the Telecommunications Act. In its reply comments, CIX emphasized its opposition to the Bell Operating Companies (BOC) interpretation and use of the term "interLATA information service." The BOCs had argued in their comments to the FCC that Section 271 restrictions do not apply when a BOC or its affiliate provides an information service.

The BOCs had attempted to convince the FCC that the scope of Section 271 is limited to "interLATA service." The BOCs tried to argue that information services are not interLATA services. They did this my making the claim that information services and telecommunications are mutually exclusive and then citing the Act's definition of "interLATA service" which states that "interLATA service means telecommunications between points in two different LATAs." Thus they argued that information services could not be interLATA services and therefore Section 271 did not apply to information services.

CIX in its reply comments stated that "this argument cannot withstand legal scrutiny because it relies upon an intentional misreading of the defini-

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How many Internet users in China?

A Look at Competing Estimates

By Will Foster

According to the China Internet Network Information Center (CNNIC) the number of Chinese Internet users, at the end of 2000, had broken the 22 million mark. Six months ago CNNIC had estimated that there were 16.9 million users. However, there continues to be debates over how accurate these numbers are. If accurate, the numbers show a growth rate of 30% in six months.

According a study released on January 11 by the Hong Kong based market research firm Interactive Audience Measurement Asia Ltd. (IAMAsia), the number of people with Internet access in China is 25% percent lower than the CNIC estimates. IAMAsia estimates that only 15.2 million people on the mainland have Internet access. IAMAsia survey telephoned 31,210 people in 13 cities. It claims its survey is accurate to within 0.44 percent. IAMAsia believes that the Internet-using population grew by 15.4% percent in the second half of 2000, while CNNIC claims that the growth rate is 18.3%.

CNNIC does not disclose its methodology for calculating the number of users though in the past they have used the number of Internet subscribers as a baseline and multiplied that number by an estimate of the number of users per subscription. CNNIC is part of the Chinese Academy of Social Sciences and also has connections to the Ministry of Information Industries.

Another firm Horizon Research announced that according to its survey of Chinese urban residents there are between 27 million to 30 million Chinese who are using the Internet. Horizon Research predicts that the Internet user population will grow to 45 percent of the total urban population.

> "If accurate, the numbers show a growth rate of 30% in six months"

On the conservative side, the International Data Corporation estimates that the number of Internet users would not exceed 9 million by the end of 2000.

Since the number of users is taken as the most important indicator of the Internet's penetration, there is considerable debate within China on whose methods are most accurate and what numbers should be used for investment purposes. ▲

FCC Report

continued from page 4

tions of language and construction of the 1996 Act, and clearly conflicts with the Congressional intent embodied therein." By pointing to the Act, the FCC's prior orders, the decisions of the D.C. Circuit, and the prior arguments of the BOCs themselves, CIX argued that there the concept of interLATA information services holds up and that Section 271 provisions apply to it.

FCC RELEASES TWO STUDIES ON INTER-CARRIER COMPETITION

The Federal Communications Commission's Office of Plans and Policy today released two papers proposing alternative inter-carrier compensation agreements. Because inter-carrier compensation is such an important issue for CLECs and because CLECs are so important to ISPs, CIX is watching the debate closely.

One paper is entitled "Bill and Keep at the Central Office as the Efficient Interconnection Regime" is available at http://www.fcc.gov/Bureaus/OPP/working_papers/oppwp33.txt. The other is titled "A Competitively Neutral Approach to Network Interconnection." http://www.fcc.gov/Bureaus/OPP/working_papers/oppwp34.txt

Both papers challenge the traditional view of inter-carrier compensation, under which the calling party's carrier, whether local or long-distance, must pay the called party's local carrier to transport and terminate the call. While approaching inter-carrier compensation problems from different perspectives, both papers question the traditional economic analysis requiring inter-carrier compensation, and both provide alternative justifications for bill-and-keep arrangements. ▲

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Multilingual Domain Names

A Case Study of Chinese

by Will Foster

On February 7, 2000 the Chinese Network Information Center (CNNIC) in Beijing PRC launched its Chinese domain name resolution protocol after a series of trials. Under the new system, there are two ways CNNIC supports Chinese character based domain names. One involves the use of Chinese characters in the second-level domain name under the first level domain name of the ASCII character based ".CN". The second method involves a true Chinese domain name where the characters of both the first and second level domain names are in Chinese.

CNNIC has been working within the Chinese Domain Name Consortium (CDNC) to ensure compatibility and reduce conflict between the Chinese domain systems of CNNIC (PRC), TWNIC (Taiwan), HKNIC (Hong Kong), MONIC (Macau). Under CNNICs solution, CNNIC and TWNIC will exchange registry information. In addition, the encoding system used in Taiwan (BIG5) will be supported by CNNIC. Supposedly, users in the PRC who enter a BIG5 domain name in the ".TW" domain, will be directed to the appropriate site in Taiwan and visa versa.

The CNNIC all Chinese domain name solution involves the use of a special client side application which can be downloaded at CNNIC's website (www.cnnic.net.cn). However, the application is not needed if the customer's Domain Name Server (DNS) has been patched to support CNNIC's rules.

It is important to note that users who try and access a Chinese character domain name under the ".CN" top level domain will not need to use the application or have access to a DNS server that is patched.

The CNNIC system supports three encoding methods: the National Standard (GB2312 known as GB), the Industry Standards (BIG5), and the International Chinese standards (UTF-8), the UNICODE standard that has been embraced by the Internet Engineering Task Force (IETF). The CNNIC system translates GB and BIG5 encoding into UTF-8 when navigating DNS. However, some sources question how compatible CNNIC's solution will be with the direction the IETF eventually takes with regard to multilingual domain name resolution (see accompanying article).

> "...there are two ways CNNIC supports Chinese character based domain names."

CNNIC is working with application developers to provide solutions for Chinese character e-mail addresses and Chinese character virtual hosts and servers. It has also registered 9 register providers.

On November 2000, Verisign an American company started to register Korean, Japanese and Chinese character based domain names under the ".com" domain name. One week later the Ministry of Information Industries of China announced that only CNNIC was authorized to register Chinese domain names and Chinese registries. Don Telage of Verisign met with Chinese authorities during the second week in February 2001 to work out a compromise. ▲

Commercial Internet eXchange Association Policy Achievements for 2001

Each month CIXtra will provide a summary of recent policy and industry achievements. We're happy to share our work with our members and all of the major filings and letters can be found on the new CIX website.

BROADBAND AND ADVANCED TECHNOLOGIES

FCC FILINGS

- Reply Comments: In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities GN Dkt. No. 00-185 - January 10, 2001

EX PARTE

- Oral Ex Parte addressed to Magalie Salas of the FCC re: Policy and Rules Concerning the Interstate, Interexchange Marketplace CC Docket 96-61, Implementation of Section 254(g) of the Communications Act of 1934, as amended 1998 Biennial Regulatory Review - Review of Customer Premises Equipment an Enhanced Services Unbundling Rules In the Interexchange, Exchange Access and Local Exchange Markets CC Docket No. 98-183 - February 20, 2001

LOCAL COMPETITION

FCC FILINGS

- Comments of the Commercial Internet exchange Association in the matter of Application by Verizon New England Inc., Bell Atlantic Communications, Inc., NYNEX Long Distance Company and Verizon Global Networks, Inc, for Authorization to Provide In=Region, InterLATA Services in Massachusetts, CC Docket No. 01-9 - February 6, 2001

INDUSTRY PARTICIPATION

LOCAL

- VISPA Meeting, Winchester, Virginia - January 2001
- US Government ENUM Policymaking Process, McLean, Virginia - February 2001
- NetCaucus Advisory Committee - Kick-Off "Reception and Technology Fair - February 2001
- ccTLD - WIPO, Washington, DC - February 2001
- NARUC Meetings, Washington, DC - February 2001

NATIONAL

- PTC 2001, Honolulu, Hawaii - January 2001 Panelist: Internet Charging
- NANOG 21 - Atlanta, Georgia - February 2001
- Broadband Wireless World Forum 2001 - February 2001 U. S. Federal & State Policy Perspectives for ISPs Panels: Washington in 2001 Law Enforcement and ISP Compliance SPAM for ISPs

INTERNATIONAL

- RIPE 38, Amsterdam, Netherlands - January 2001
- World ISP Forum, London, England - February 2001

MERGERS AND ACQUISITIONS

FCC FILINGS

Letters

- Letter to Chairman William E. Kennard, Federal Communications Commission, offering views on CS Docket 00-30 AOL-Time Warner Merger regarding FCC's involvement in promoting Interoperability among different instant messaging standards - January 4, 2001

MISCELLANEOUS

Letters

- Letter to Senator Orrin Hatch, Chairman, Senate Judiciary Committee re: Nomination of former Senator John Ashcroft for Attorney General of the United States - January 11, 2001

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