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**From:** James Ramsay  
**To:** Tcom [E-mail]  
**Date:** Thu, Mar 13, 2003 5 27 PM  
**Subject:** 03-13 Ramsay Report & " NARUC PRESIDENT APPOINTS UNE-P IMPLEMENTATION TASK FORCE

RAMSAY REPORT - Thursday, March 13, 2003

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**MAR 25 2003**

**Federal Communications Commission  
Office of the Secretary**

Note FCC seeking Comment on USF JB Recommendation under FR cites of interest below...and also -

\*\*\*\*\*March 13, 2002 NARUC PRESIDENT APPOINTS UNE-P IMPLEMENTATION TASK FORCE (NARUC Press Release) WASHINGTON, DC - March 13, 2003- National Association of Regulatory Utility Commissioners (NARUC) President David A. Svanda today announced the appointment of members to the NARUC President's Task Force for the Implementation of the UNE-P Order. The Federal Communications Commission (FCC) recently adopted rules concerning incumbent local exchange carriers (LECs) obligations to make elements of their networks available on an unbundled basis to new entrants. The FCC's action will allow the States to make a State and geographic-specific determination on the future of the unbundled network element-platform (UNE-P), which has fostered competition and allowed more than 10 million consumers nationwide to receive their local telephone service from new service providers. "I am proud to be appointing the following highly qualified and experienced officials to the Task Force. These Commissioners represent a wide cross-section of State public utility Commissioners who will collaborate among the State commissions, with the FCC, and with other interested parties across the country on this critical issue," stated President Svanda. "These State Commissioners provide the Task Force with a regional diversity to ensure that all aspects of the unbundling issue are represented when assisting the States in their own granular analysis. They bring forth great experience and expertise that will be crucial to addressing the issues that the States will be faced with in implementing the FCC's UNE-P order. These Commissioners have shown a technical understanding of the unbundling issues in many other proceedings to date. Their prior experiences will help to assure that the States succeed in implementing the FCC's UNE-P order in a timely and organized manner."

President Svanda also gave the task force its initial charge of responsibilities, including fostering the exchange of information among the states, providing technical assistance, and facilitating discussions with interested parties. Rebecca Klein, Chairman of the Texas Public Utility Commission, accepted President Svanda's challenge to spearhead the efforts of the task force.

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"I am honored to work with my fellow Commissioners to facilitate a unified effort that will lay the foundation for the States' timely implementation of the FCC's triennial review order," stated Chairman Klein. "This joint effort will help create procedural uniformities where appropriate, while recognizing unique and granular facts within each State."

The Task Force members include the following State Commissioners:

- Becky Klein of the Texas Public Utility Commission, serving as Task Force Chair;
- Dave Svanda of the Michigan Public Service Commission;
- JoAnne Sanford of the North Carolina Utilities Commission;
- Marilyn Showalter of the Washington Utilities & Transportation Commission;
- Connie Hughes of the New Jersey Board of Public Utilities;
- Bob Rowe of the Montana Public Service Commission;
- Ronda Fergus of the Ohio Public Utilities Commission;
- Lila Jaber of the Florida Public Service Commission; and
- Paul Vasington of the Massachusetts Dept. of Telecommunications & Energy.

\*\*\*\*\*The rest of the Ramsay Report Follows below - but first... PEOPLE NEWS

MAUREEN (the irreplaceable) LEAVES COMPTTEL -note from MO - "I am writing to let you know that I have accepted a new job as the Director of News and Public Information at the National Academy of Sciences (National Academies). My last day at CompTel is March 21. Gail Lawyer will take over my duties/job upon my departure. Gail has been CompTel's Director of Communications for over a year. She has done an outstanding job for the competitive industry and I believe she will continue to do great work as the manager of the CompTel's communications department. You can reach Gail at glawyer@comptel.org or 202/296-6650. It has been a pleasure working with all of you. Gail will have my contact information if you need to reach me after March 21. Maureen O'Leary V.P. of Communications CompTel (202) 296-6650 [well, NAS gotta great deal (Comptel is lucky it has Gail to fall back on...) Friends will want to express condolences to Russ and congratulations to Maureen ....Good luck Ms. OLeary, I for one will miss you a great deal. Brad]

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(3) \*\*\*Merger Conditions - FCC GRANTED IN PART VERIZON'S REQUEST TO COUNT ITS SONET AND SWITCHED VOICE EXPENDITURES TOWARD SATISFACTION OF CONDITION XVI OF THE BELL ATLANTIC/GTE MERGER CONDITIONS.

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(7) Universal Service - ETC - 03/12/03 - FCC GRANTED THE PETITION OF FARMERS CELLULAR TELEPHONE, INC. TO BE DESIGNATED AS AN ELIGIBLE TELECOMMUNICATIONS CARRIER

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(3) Federal Fund - Contribution Waivers - 03/12/03 SPRINT SPOKE WITH PAUL GARNETT OF THE WIRELINE COMPETITION BUREAU REGARDING THE PETITION FOR INTERIM WAIVER FILED BY BELL SOUTH, SBC AND VERIZON - CONFIRMING SUPPORT OF AVERAGING USF CHARGES ACROSS A BROAD BASE OF CUSTOMERS

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I. TODAY'S FEDERAL REGISTER CITES OF INTEREST:

(1) Spectrum - Advanced Wireless Service Proposed rule - FCC SEEKS COMMENT ON HOW TO USE THE REALLOCATED MOBILE SATELLITE SERVICE SPECTRUM AS WELL AS OTHER BANDS PREVIOUSLY PROPOSED FOR ADVANCED WIRELESS SERVICE USE, THE RELOCATION OF THE MULTIPOINT DISTRIBUTION SERVICE, AND ADDITIONAL FLEXIBILITY FOR THE UNLICENSED PERSONAL COMMUNICATIONS SERVICE BAND SPECTRUM, TO PROMOTE MORE EFFICIENT SPECTRUM USE which, in turn, serves the public interest. DATES: Written comments April 14, 2003, and reply comments April 28, 2003. [ET Docket No. 00-258 and IB Docket No. 99-81 ; FCC 03-16] CONTACT: Jamison Prime, Office of Engineering and Technology, (202) 418-7474 e-mail jprime@fcc.gov.

URL:

Full Story

<http://a257.g.akamaitech.neff7/257/2422/14mar20010800/edocket.access.gpo.gov/2003/03-6038.htm>

(2) Spectrum - Advanced Wireless Service Rule - FCC REALLOCATES PORTIONS OF THE FREQUENCY BAND CURRENTLY USED BY THE MOBILE-SATELLITE SERVICE (MSS) TO PROVIDE ADDITIONAL SPECTRUM FOR FIXED AND MOBILE SERVICES, AND DENY CELLULAR TELECOMMUNICATIONS AND INTERNET ASSOCIATION'S PETITION FOR RECONSIDERATION. This action furthers the Commission's efforts to identify and reallocate

spectrum that can be used to promote the development and deployment of advanced wireless services, including those commonly associated with " 3 G wireless applications. DATES: Effective April 14, 2003. CONTACT: Jamison Prime, Office of Engineering

and Technology, (202) 418-7474. - [ET Docket No. 00-258 and IB Docket No. 99-81 ; FCC 03-16]

URL:

Full Story:

<http://a257.g.akamaitech.neff7/257/2422/14mar20010800/edocket.access.gpo.gov/2003/03-6039.htm>

(3)\*\*\*\*Universal Service - FCC SEEKS COMMENT FEDERAL-STATE JOINT BOARD ON

UNIVERSAL SERVICE RECOMMENDED DECISION REGARDING THE DEFINITION OF SERVICES SUPPORTED BY UNIVERSAL SERVICE. In its Recommended Decision, the Joint Board generally recommended that the Commission not modify the existing list of services supported by universal service. The Joint Board was unable to reach agreement, however, on whether equal access to interexchange service (equal access) satisfies the statutory criteria contained in the Communications Act of 1934, as amended, and should be added to the list of supported services. The Commission seeks comment regarding the Joint Board's recommendations and positions.

DATES: Comments April 14, 2003. Reply comments April 28, 2003. [CC Docket 96-45; FCC 03-13] CONTACT: Katherine Tofigh or Diane Law Hsu (202)418-7400.

Full Story:

<http://a257.g.akamaitech.net/7/257/2422/14mar0010800/edocket.access.gpo.gov/2003/03-6092.htm>

## II. DAILY DIGEST:

### II. FCC DAILY DIGEST ITEMS FROM YESTERDAY AND TODAY

(1) Advanced Services - Ultra-Wideband - FCC AMENDED PART 15 OF THE RULES REGARDING THE UNLICENSED OPERATION OF ULTRA-WIDEBAND (UWB) TRANSMISSION SYSTEMS. Seek further review of the UWB standards to determine where additional changes warrant consideration. By MO&O & FNPRM. (Dkt No. 98-153). Action by: the Commission. Adopted: 02/13/2003 by MO&O. (FCC No. 03-33). OET

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[http://hraunfoss.fcc.gov/edocs\\_public/ath/FCC-03-33AI .doc](http://hraunfoss.fcc.gov/edocs_public/ath/FCC-03-33AI.doc)

(2) Changes in Cmr. Capps Office - COMMISSIONER MICHAEL J. COPPS TODAY ANNOUNCED THE FOLLOWING CHANGES TO HIS STAFF: - Congrats to Jessica Rosenworcel who has been named Cops's Competition and Universal Service Legal Advisor. Ms. Rosenworcel joined the Commission in May 1999. She presently serves as legal counsel to the Wireline Competition Bureau Chief. Prior to her current position, she was an attorney in the Policy and Program Planning Division of the Common Carrier Bureau. In her years with the Commission, Ms. Rosenworcel has worked on a wide variety of issues involving implementation of the Telecommunications Act of 1996. Prior to joining the Commission, Ms. Rosenworcel was an associate with the law firm of Drinker Biddle & Reath. Ms. Rosenworcel received her J.D. from New York University School of Law. She graduated with a B.A. in Economics from Wesleyan University. Jordan Goldstein will continue to serve as Senior Legal Advisor. In addition to his duties as senior advisor, Mr. Goldstein will serve as Media and Consumer Protection Legal Advisor.

(3) Merger Conditions - FCC GRANTED IN PART VERIZON'S REQUEST TO COUNT ITS SONET AND SWITCHED VOICE EXPENDITURES TOWARD SATISFACTION OF CONDITION XVI OF THE BELL ATLANTIC/GTE MERGER CONDITIONS. To encourage Verizon to enter other incumbent local exchange carriers' ("incumbent LEC") regions and compete for local customers, the Bell Atlantic/GTE Merger Order requires the company to spend \$500 million to provide "Competitive Local Service" outside its incumbent territory within three years of the closing of the merger

(i.e., by June 30, 2003). The Merger Conditions define "Competitive Local Service" as "services, including resale, that compete with traditional local telecommunications services offered by incumbent local exchange carriers or . . . Advanced Services to the mass market." The Merger Conditions require Verizon to spend at least half of the total requisite amount (i.e., \$250 million) "to construct, acquire, lease, use, obtain or provide facilities, operating support systems, or equipment that are used to service customers in Out-of-Region Markets" ("Facilities Expenditure Requirement"). Verizon may use the other half to acquire customers for Competitive Local Service in those Out-of-Region Markets ("Service Expenditure Requirement"). These two mandatory expenditures constitute Verizon's out-of-region expenditure commitments. If Verizon does not satisfy these requirements by June 30, 2003, it must pay the U.S. Treasury 150 percent of the difference between what it spent and what it was obligated to spend. On June 24, 2002, the Commission approved Verizon's February 7, 2002 request to count \$90.5 million of its investment in Northpoint Communications Group, Inc. toward the out-of-region requirements, including \$50.2 million toward the Facilities Expenditure Requirement. Previously, the former Common Carrier Bureau found that Verizon satisfied \$297.4 million of the condition, including an expenditure of \$113.4 million for facilities, with its purchase of OnePoint, a DSL provider. Thus, to date the Commission or the staff has determined that Verizon has spent a total of \$387.9 million, including \$163.6 million for facilities, towards the two out-of-region requirements. In Verizon's February 7, 2002 proposal, it asked that an additional investment of \$20.292 million qualify to help satisfy the out-of-region requirements. In particular, Verizon asserts that it spent \$18.192 million on synchronous optical network ("SONET") investment and \$2.1 million on switched voice services in Los Angeles, Seattle, and Dallas. Verizon asserts that all this investment should qualify as facilities expenditures. The SONET facilities are comprised of fiber rings and associated equipment located in the three cities. Verizon is an incumbent LEC in each city, and the fiber rings straddle the line between the Verizon incumbent territories and those of other incumbent LECs. As a result, portions of the rings and associated equipment lie within Verizon's incumbent region. The Commission did not make a decision on this investment in the Northpoint Order; instead it deferred judgment to a later date. DISCUSSION The first issue here is whether Verizon spent the \$20.292 million "to provide services . . . that compete with traditional local telecommunications services offered by incumbent local exchange carriers. . . ." The second issue is whether such investment may count toward the out-of-region requirements if it is physically located within Verizon's incumbent region. We approve \$13.95 million of Verizon's request to count \$20.292 million of its SONET and switched voice expenditure toward its out-of-region expenditure condition. Specifically, we approve \$11.85 million of Verizon's proposed \$18.192 million SONET investment and all of Verizon's proposed \$2.1 million in switched voice investment. We find that the remaining SONET investment (i.e., \$6.342 million) does not qualify as "out-of-region" because it is physically located in Verizon's incumbent region. Therefore, we deny Verizon's request to count it toward the condition. A. SONET Investment We find that Verizon's SONET investment provides a "service[], including resale, that compete[s] with traditional local telecommunications services offered by incumbent local exchange carriers." Verizon states that it uses the SONET facilities to provide special access and transport services that compete with the local incumbents' special access and transport services. For the customers actually and potentially served by the portions of the fiber rings located outside Verizon's incumbent region, Verizon provides

alternatives to the incumbents' traditional special access and transport services. **We** also find, based on Verizon's showing, that all of the SONET expenditures are for facilities. **We** decline, however, to count all Verizon's SONET investment toward the condition. In its previous filings, Verizon proposed, and the former Common Carrier Bureau agreed, to allocate its investment based on the percentage physically located outside Verizon's incumbent region. Verizon argues that we should not use this approach here. **We** conclude, however, that in the absence of any alternative methodology or data, physical location is a reasonable basis for allocation in light of past practice. Verizon states that, unlike the OnePoint case, "100% of the investment is being used for out-of-region services." Even crediting this statement as true, it does not change our conclusion. First, while it may be true that all the investment can, at any given time, be used to complete communications from out-of-region customers, it is also true that the same facilities can be used to complete communications originating from in-region customers, either to other in-region customers or out-of-region customers. The fact that all the ring facilities can be used to provide out-of-region services does not change the fact that all the facilities could also be used to provide in-region services. Thus, Verizon's argument does not support a decision that **all** the investment should count toward satisfaction of the out-of-region requirement. Second, although it admits that the facilities serve in-region customers, Verizon has not proposed a method for dividing the investment between in-region and out-of-region based on the customers served, or on any other basis for that matter. In the absence of a better method than Verizon's proposal simply to allocate all investment to out-of-region, and based on the Common Carrier Bureau's previous approach, we find allocation based on physical location to be reasonable. In a related argument, although the merger condition does not specify a methodology to allocate Verizon's investment between in-region and out-of-region, Verizon states that all its SONET investment should qualify because the investment "is designed to provide services to out-of-region customers. **We** disagree with Verizon that its intent governs satisfaction of the condition. Instead, we find that the condition's language and purpose require that we exclude some of the investment given Verizon's statement that in-region customers **use** the facilities, e.g., to communicate with other in-region customers. The text of the condition requires Verizon to spend its funds "to provide [Competitive Local Service] outside the [Verizon] Service Areas [], within the United States." In the absence of any customer **use** data, physical location is a reasonable basis for allocating the investment. As a result, we deny Verizon's request to count the in-region investment toward satisfaction of the condition. Verizon states that **\$11.85** million of its SONET investment lies outside its incumbent region. **We** therefore conclude that Verizon spent **\$11.85** million towards its out-of-region commitment, including the facilities expenditure requirement. B. Switched Voice Expenditure **We** find that the **\$2.1** million Verizon spent on switched voice investment qualifies as an out-of-region expenditure. **We** find that the investment is "traditional" local service under the Merger Conditions because it is voice service. Further, Verizon represents that all the investment is located outside its incumbent territory. Finally, the investment, for which Verizon received rights-to-use switching capacity, qualifies as a facilities expenditure because it was made "to construct, acquire, lease, **use**, obtain, or provide facilities, operating support systems, or equipment that are used to serve customers in Out-of-Region Markets." II. ORDERING CLAUSE Accordingly, IT IS ORDERED, pursuant to sections 1-4, 201-205, 214, 251, 303(r), and 309 of the Communications Act of 1934, as amended, 47 U.S.C. " 151-154, 201-205, 214, 251, 303(r), and

309, that Verizon's request to count its SONET and switched voice expenditures toward satisfaction of Condition XVI of the Bell Atlantic/GTE Merger Conditions IS GRANTED IN PART as described herein.. (FCC No. 03-53).

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[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-03-53A.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-53A.doc)

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[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-03-53A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-53A1.pdf)

Textfile:

Full Story:

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-03-53A1.txt](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-53A1.txt)

(4) Slamming - FCC GRANTED COMPLAINTS AGAINST (1) AXCES, INC (DA NO 03-724),

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-724A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-724A1.doc)

(2)WORLD COM, INC. (DA NO. 03-727)

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-727A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-727A1.doc)(3)

UKI COMMUNICATIONS. (DA No. 03-726)

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-726A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-726A1.doc)

(4) BUSINESS SAVINGS PLAN. (DA No. 03-722)

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-722A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-722A1.doc)

(5) UKI COMMUNICATIONS, INC. (DA NO. 03-725).

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(6) LEAST COST ROUTING, INC. (DA NO. 03-729).

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-729A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-729A1.doc)

(7) SPRINT COMMUNICATIONS (DA NO. 03-735).

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-735A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-735A1.doc)

(8) YESTEL, INC. (DA No. 03-731).

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(9) BUYERSONLINE. (DA No. 03-704).

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(10) TALKAMERICA. (DA NO. 03-714).

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(11) CIERRA COM SYSTEMS. (DA NO. 03-730).

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-730A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-730A1.doc)

(12) BROADVIEW NETWORKS. (DA NO. 03-703).

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-703A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-703A1.doc)

(13) 011 COMMUNICATIONS. (DA NO. 03-737).

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-737A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-737A1.doc)

(14) LEAST COST ROUTING, INC. (DA No. 03-713).

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-713A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-713A1.doc)

(15) LEAST COST ROUTING, INC. (DA NO. 03-746).

[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-746A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-746A1.doc)

(16) LCR TELECOMMUNICATIONS, LLC. (DA NO. 03-699).

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(17) MAIN STREET TELEPHONE COMPANY. (DA NO. 03-706).

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(18) SPRINT COMMUNICATIONS COMPANY. (DA NO. 03-717).

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(19) SPRINT COMMUNICATIONS COMPANY. (DA NO. 03-718).

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(20) SPRINT COMMUNICATIONS COMPANY. (DA NO. 03-720).

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- (21) AMERICAS DIGITAL SATELLITE TELEPHONE. (DA NO. 03-702).  
<http://hraunfoss.fcc.gov/edocsgpublic/atth/DA-O3-702A1.doc>
- (22) COMMUNICATE TECHNOLOGICAL SYSTEMS, LLC. (DA NO. 03-707).  
[http://hraunfoss.fcc.gov/edocs\\_public/ath/DA-O3-707A1.doc](http://hraunfoss.fcc.gov/edocs_public/ath/DA-O3-707A1.doc)
- (23) WORLD COMMUNICATIONS SATELLITE SYSTEMS. (DA No. 03-705).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-705A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-705A1.doc)
- (24) COMMUNICATE TECHNOLOGICAL SYSTEMS, LLC. (DA No. 03-712).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-712A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-712A1.doc)
- (25) ADVANTAGE TELECOMMUNICATIONS CORPORATION. Granted (DA No. 03-700).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-700A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-700A1.doc)
- (26) ADVANTAGE TELECOMMUNICATIONS (DA No. 03-734).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-734A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-734A1.doc)
- (27) LONG DISTANCE CONSOLIDATED BILLING CO (DA No. 03-711).  
[http://hraunfoss.fcc.gov/edocsgpublic/att-03-711\\_A1.doc](http://hraunfoss.fcc.gov/edocsgpublic/att-03-711_A1.doc)
- (28) PRIMUS TELECOMMUNICATIONS GROUP D/B/A LEAST COST ROUTING. (DA No. 736).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-701A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-701A1.doc)
- THE PHONE COMPANY OF ARIZONA. (DA No. 03-701).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-701A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-701A1.doc)
- (5) Slamming - FCC DENIES COMPLAINTS AGAINST (1) TALK AMERICA, (DA No, 03-715)  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-715A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-715A1.doc)
- (2) CALLWAVE, INC. (DA NO. 03-738).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-738A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-738A1.doc)
- (3) COMMUNICATE SYSTEMS. (DA No. 03-723).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-723A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-723A1.doc)
- (4) QWEST COMMUNICATIONS. (DA No. 03-698).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-698A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-698A1.doc)
- (5) ALLEGIANCE TELECOM, INC (DA NO. 03-710).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-710A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-710A1.doc)
- (6) ALLEGIANCE TELECOM, INC. (DA NO. 03-728).  
<http://hraunfoss.fcc.gov/edocsgpublic/atth/DA-O3-728A1.doc>
- (7) SPRINT COMMUNICATIONS COMPANY. (DA No. 03-716)  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-716A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-716A1.doc)
- (8) WORLD COM NETWORK SERVICES, INC. (DA No. 03-749).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-749A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-749A1.doc)
- (9) PRIMUS TELECOMMUNICATIONS, INC. (DA NO. 03-733).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-733A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-733A1.doc)
- (10) SPRINT COMMUNICATIONS (DA No. 03-732).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-732A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-732A1.doc)
- (11) SPRINT COMMUNICATIONS COMPANY, LP. (DA No. 03-739).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-739A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-739A1.doc)
- (12) SPRINT COMMUNICATIONS COMPANY. (DA NO. 03-719).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-719A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-719A1.doc)
- (13) PRIMUS TELECOMMUNICATIONS, INC. (DA NO. 03-740).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-740A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-740A1.doc)
- (14) AT&T CORPORATION. (DA No. 03-709).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-709A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-709A1.doc)
- (15) AT&T CORPORATION. (DA NO. 03-708).  
[http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DA-03-708A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-708A1.doc)

(6) Universal Service - Disabled Access - FCC ACTS TO ENSURE THAT PERSONS WITH DISABILITIES ARE ABLE TO PARTICIPATE FULLY IN FCC PROGRAMS AND ACTIVITIES. New "Accessibility Handbook Details Uniform Procedures for



III. OTHER NEWS CLIPS:

(1) BROADBAND - Deployment **Issues** - ASCE Pipelines Conference, Baltimore, Maryland, USA: July 13-16, 2003- Municipal Optical Fiber Through Existing Sewers, Storm Drains, Drinking Waterlines, and Gas Pipes May Complete the Last Mile Dr. Jey K. Jeyapalan, P.E. 1 Abstract Making money in the new market conditions requires a whole new paradigm. Investing in dedicated fiber conduits in open cut ditches to bridge the last mile to solve the fiber glut problem will not work. The very governmental, commercial, and residential end users who are craving for true broadband coming into their premises already have sanitary sewers, storm drains, waterlines, and natural gas lines reaching their premises to meet their needs. The fat pipe to carry infinite voice/video/data from multiple providers could be housed in these utilities by forming creative business partnerships among optical fiber owners, service providers, utility pipe owners, and vendors. Municipalities could even take the lead in this new paradigm, given they own and manage these underground assets for the public. By municipalities taking the initiatives for building the last mile fiber, they could meet the needs of FTTH/FTTB, renovation of their aging pipeline infrastructure, and improved sensing, surveillance, and security of vital lifelines and treatment plants.

1. Introduction None of the old and established rules for making money in the telecommunications market would work. The case of companies creating an adequate supply to cope with an increasing demand for goods and services is the basic lesson of economics in a modern world. Building at an enormous cost to compete with the assumption that the customers will come, simply did not work. The melt down among the stock values in the telecom space is a proof of this concept. First of all, the causes of the current fiber glut need to be understood; new rules need to be written with a whole new set of business partners and new financial incentives ought to be considered in the rewriting of the business plan. Dealing with the fiber glut among the companies such as AT&T, WorldCom, Global Crossings, Level 3, 360 Networks, Williams, Sprint, Qwest, Genuity, Broadwing, and other that built the long haul and backbone networks spending over \$100 billion over the past 5 years is to recognize that unless these 1 Fibotics International, 9 Sundance Road, New Milford, Connecticut, USA 06776- 3840, 1-860-354-7299, [jkjeyapalan@earthlink.net](mailto:jkjeyapalan@earthlink.net) <<mailto:jkjeyapalan@earthlink.net>> ASCE Pipelines Conference, Baltimore, Maryland, USA: July 13-16, 2003 page 2 companies are also involved in solving the last mile bottleneck that has prevented them from having the voice/video/data traffic they **so** dearly need, their fiber will remain unlit for years to come. These companies spent all this money to increase broadband capacity 1,000 times in long haul yet the capacity in the metro area increased only 10 fold in the past 5 years due to the efforts of fewer players namely, Time Warner, **XO** Communications, McLeod, FiberNet, OnFiber, Cogent, Winstar, and other. The situation of fiber glut in the long haul and backbone fiber is like freeways being almost empty because the automobile owners have no on and off ramps to these freeways from most locations to get on or to get off. These companies need to recognize that unless they are involved in the buildout of the last mile fiber that connects from the current POPs to the end users, they will end up waiting forever for the voice/video/data traffic to increase. In the old set of rules, these companies always thought in terms of having to make their permit applications to the city council, wait forever for approval, make open cuts of the highly trafficked roads in the busiest parts of our highly populated cities, and lay their last mile fiber in their own conduits at an enormous first time cost. These forced most cities to discourage new open

cut excavations involved in the last mile work. The very governmental, commercial, and residential end users who are craving for infinite bandwidth through optical fiber networks coming into their premises already have sanitary sewers, storm drains, waterlines, and natural gas lines reaching their premises for providing essential services to meet their needs. These underground pipes start in the vicinity of the current POPs of optical fiber in the metro loops or backbones and finish inside of the very buildings where the last mile fiber needs to end to provide the on and off ramps for these information highways made of optical fiber. It makes all the sense in the world to locate the LAST MILE fiber in these existing rights of way on sewers, water mains, and gas pipes to deploy last mile fiber quicker and at a cheaper cost, particularly when some of these pipes are renovated.

2. World is Hungry for Bandwidth More than 110 million North Americans are expected to telecommute to work by 2010. This will increase our productivity and quality of life significantly. The rest of the world also would have similar unprecedented numbers of people working from these home offices. The world needs more bandwidth to meet its demands for better homeland security, better classrooms, better government, better medicine, better science and technology, better entertainment, better quality of life, and better job opportunities. Copeland and Malik [7] reported that without widespread high-speed Internet access, the technology industry and the economy would remain stalled. Wall Street Journal also wrote several times on this subject and an example is in [57]. Kennedy [48] asserts that the utilities are well positioned to solve the last mile problems than any other players due to the fact that they have the ability and incentive to invest in a high-capital cost, low-return access network. The optical fiber industry has kept its pace of inventing better fibers and DWDM equipment. For example, Hecht [12] reports that Alcatel and NEC independently have squeezed more than 10 trillion bits per sec through a single strand of fiber. This capacity translates to carrying over 150 million telephone calls simultaneously in a strand that measures less than 7 microns in diameter or less than 5 % of the thickness of the human hair. Despite these major advances, an optical fiber network is only as fast as its weakest link. In America, over 400,000 km of fiber cables are in the ground covering long haul, backbone, and metro loops; however, the missing link is still the last mile of route length as short as 5 to 500 m. These limitations result in a mere 10% of the long haul fiber being lit.

3. Challenges Within the Last Mile There are numerous challenges for anyone other than local utilities or ILECS to build the last mile fiber. Local municipalities control access of much needed rights of way. They charge franchise fees, make the permit process really difficult, and pass numerous ordinances to discourage open cut construction of fiber and even impose network build moratoriums. Some even demand free fiber, where the network provider will lose even their existing revenue from the very municipalities, while requiring that the network builder pass on to them a portion of the gross revenue from the remaining fiber. Often, the areas where municipalities are willing to let fiber construction proceed are not where demand is and even in these, municipalities enforce strict time limits. The ILECS already have infrastructure in place in most locations and only fiber laterals are left to bridge the last mile. When local utilities enter the business of building their own fiber and running a network provider, unless the private companies join in this effort, they would find even more fierce competition in the only remaining profitable area of fiber business named the last mile. Building owners also erect hurdles such as entrance fees, connection fees while even unwilling to provide permission to many CLECS. Even regulatory environment has not given the CLECS the legal teeth they needed to compete more aggressively in the marketplace against

the ILECS. The result is a mere 10% penetration by CLECS in the local access market even after 6 years of operating in the aftermath of the Telecom Act of 1996. Most significantly, most last mile fiber carrying conduit design and installation has been in the hands of mostly telecom personnel with little or no input from civil engineers, resulting mostly in expensive and laborious implementation adding further to the problems surrounding the last mile. If adequate civil engineering talent were involved in approaching the municipalities for access for rights of way on behalf of fiber installers, given the very municipality public works departments are managed by civil engineers, matters would have proceeded a lot quicker.

4. Underground Pipes, Plants, Pumps, and Their Security Needs If the optical fiber technology could be rolled out at a faster pace, with less hurdles in rights of way acquisition, and at a lower cost, then end-to-end optical fiber connectivity could win this race in the coming years in the last mile. For this to happen, we need to turn to existing underground infrastructure to build our communication networks, so that we can avoid additional congestion underground. North America already has invested many trillions of dollars in the past century building an extensive underground pipe network. These underground utilities were carefully engineered, constructed, operated, and maintained with mostly public funds. These have been stable well-protected structures deep in the ground forming a vast network as shown in Table 1.

Table 1: Underground Utilities in America

Type	Miles	km
Sanitary sewers	800,000	1,280,000
Storm drains	450,000	720,000
Combined sewers	100,000	160,000
Potable waterlines	850,000	1,360,000
Natural gas lines	600,000	960,000
Petroleum pipelines	300,000	480,000
Irrigation pipelines	200,000	320,000
Industrial waste lines	550,000	880,000
Total	3,500,000	5,600,000

miles (5,600,000 km) Other countries have similar underground pipe networks. These have served their intended functions meeting our needs for over 100 years. Using them for the un-intrusive housing of broadband fat pipe would speed up significantly the deployment of fiber in the most challenging last mile. These would afford us an opportunity to monitor the security of these underground lifelines. These would also provide us an opportunity to operate treatment plants, compressors, pumps, and other equipment unmanned from remote unknown locations toward better homeland security measures. Additional details on the win-win solutions from the business plans involving optical fiber deployment in existing sewers and gas pipes have been discussed in more detail in Jeyapalan [17 to 41]. There are a number of cities around the world that have used existing utility pipes for building their broadband networks while serving their originally intended functions and Table 2 provides a partial list. It appears the needs of FTTH/FTTB, renovation of aging pipeline infrastructure, and improved sensing and surveillance could all be accomplished by municipalities taking the lead to build the last mile networks with suitable partners in existing pipeline infrastructure as outlined in Jeyapalan [40,41].

Table 2: Broadband networks in underground utilities

City	How Long?
Tokyo	850 km in sewers
Vienna	400 km in sewers
Taipei	400 km in gas lines
Hamburg	100 km in sewers
Berlin	50 km in sewers
Yokohama	42 km in sewers
Kawasaki	37 km in sewers
Ogaki	24 km in sewers
Sapporo	21 km in sewers
Nagoya	18 km in sewers
Kyoto	18 km in sewers
Minami	13 km in sewers
Yodogawa	11 km in sewers
Albuquerque	9 km in sewers
Osaka	6 km in sewers
Toronto	5 km in sewers
Hmeji	5 km in sewers
Akashi	5 km in sewers
Indianapolis	5 km in sewers
Hanau	5 km in sewers
Tokushima	4 km in sewers
Dublin	3 km in sewers
Munich	3 km in sewers
Amsterdam	2 km in sewers
Copenhagen	2 km in sewers
Madrid	1 km in sewers
Boston	1 km in sewers

5. Possible Business Plans In the new paradigm to make money in the current market conditions, we have to consider bridging the last mile as fast as possible with the lowest possible cost. Using the existing pipe networks for

deploying last mile fiber could be done in any of the following business plans: Plan 1: The fiber builder will either purchase or lease existing retired pipelines that are no longer used in active service in exchange for either an upfront payment or an annuity type payment to the owner of this strategic asset. Pacific Gas and Electric, Key Span Energy, Con Edison, Atlanta Gas, Peco Energy, are examples of this business model. Plan 2: The fiber builder will make the pipe owner a business partner, where reserve capacity in the existing pipe network could be used by the fiber builder for installing last mile fiber in exchange for a negotiated percentage of the gross revenue. Cities of Albuquerque and Indianapolis are examples of this business model. Plan 3: The owner of the existing pipeline network will take network providers, content providers, and vendors as partners to install fiber in their pipes and operate this network. Other than the few strands needed by the pipe owner for their needs, the rest would be leased to any number of the above partners for additional revenue to the pipe owner, where the cost of the fiber build out will be borne primarily by the pipe owner. City of Berlin is an example of this business model. Plan 4: In this plan, some elements of the above 3 plans will be combined toward optimum results for all parties concerned. The author is aware of several entities in the middle of active negotiations to reach many forms of business partnerships to deploy last mile fiber and the results will be reported at a later time. Plan 5: In this plan, the pipe owner will build and own the fiber network. Cities of Tokyo, Hamburg, Vienna, Boston, Dublin, New York, and Los Angeles are examples of this business model. 6. This Idea Has Been Around Since 1983 Using existing conduits for multiple **uses** is not a new concept. Early attempts were in Paris more than 100 years ago but poor results led to abandonment of the concept of installing multiple **utilities in the same** underground tunnels. There also were a number of projects in America about 80 years ago where telephone companies were permitted to lay their cables inside of drinking waterlines. The innovative idea of using existing fluid conduits for additional functions not originally intended, emerged again in 1983 when Jeyapalan et al. [14, 15, 16] designed 2 high pressure hydropower penstocks of size 2144 mm (**84** inch) in diameter to hang from the roofs of 6.4m(21 ft) diameter outlet tunnels at Jennings Randolph and Gathright dams in West Virginia and Virginia. These large penstocks were designed in 304L stainless steel to survive the acidic water with a pH of 3 or less flowing through the outlet tunnels. Therefore the technical issues in the current situation of using existing pipelines for housing optical cables are rather minor compared to what we coped with in 1983 and we have progressed in our civil engineering know-how in many fronts in the past 20 years. 7. Optical Fiber In Japanese Sewers Shortly thereafter, the first invention for using existing sewers for installing communication cables was developed by a group of engineers from the Water Research Center (WRC) in UK [48]. A patent was issued by the UK patent office on 16 May 1984. Subsequently, the US patent No: 4,647,251 was secured on March 3, 1987 and the assignee was Cabletime Installations Limited operating out of Washington, DC. [54] For reasons unknown even to the current employees of WRC, this patent was allowed to expire due to nonpayment of annual dues after WRC attempting to commercialize this invention for some years. Japanese assembled a robot in 1987, following an art somewhat similar to that disclosed in the UK invention, to install optical fibers initially in Tokyo sewers [45], and the Japanese applied for European, Japanese, Korean, and US patents. The US patent No: 4,822,211 was issued on April 18, 1989 with Nippon Hume, Tokyo Metro Government, and Tokyo Metro Sewer Service Corporation as co-assignees [55] to protect the robot. The primary reason for the Japanese engineers to install optical fiber in their sewers in Tokyo in 1987 was to control sewage

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 d ... i ... for pipes of 250-350 ... , ... , ... 1200mm. The  
 c ... was steered by a control unit but was pulled using winches through the  
 manholes. A special drill was used to cut a h ... 6 mm ... d ... 15 mm ... for  
 the J- hook ... c ... of the cable with its 2 part resin system that hardens in  
 the hole after activating the plunger pin once ... f ... a ... after ... g ...  
 optical fiber cable in the J- ... li Water ... of ... y 2 ... so ...  
 owns this ... ss entity and has ... c ... th ... Ja ... r ... r ... t ... t ... c  
 manufactured ... Gr ... by JT Elektronik Gmbh where 2 robots could work in  
 pipes of ... to 120 ... r ... id ... d ... t ... i ... t ... undercarriage is ... d ... A ...  
 to ... ya ... [ ... ] and ip ... o ... flu ... [ ... ] B ... v ... a ... et ... d ... t ... two ... it ... of  
 second-generation robots back to Nippon Hume. b ... if ... pt the th ... i ... of the  
 first generation. A ha ... fr ... t ... version of th ... i ... e ... s ... b ... o ... l ...  
 d is that the 3 ... its ... k ... in B ... li could ... l ... if once ... i ... d ... the  
 sewers, in a way no diff ... r ... with ... r ... s ... anes ha ... r ... r ... i  
 generation for T ... y ... Met ... i ... st ... llin the cable at high speeds under  
 c ... ptir ... al conditions as given in [3, 4]. ... t ... B ... lin drill a ... l ... d ... l ... t ...  
 ... t ... h ... s ... e ... l ... i ... nated the ... u ... f the 2 part resin bonding th ... ip ... s ... ste ... l ...  
 uses. 9. M ... Entry Technology Man-entry sewers are th ... with a diameter  
 k ... th ... 0 ... r ... The sewer lengths in N ... th ... a ... i ... of ... i ... not larger  
 th ... 100 mm ... d ... 90% ... s ... c ... i ... J ... k ... E ... the sewers of ... i  
 k ... g ... th ... ) ... n ... n ... f ... r ... i ... k ... s ... than 10 ... of ... ite ... r ... lie in the ... t  
 ir ... fa ... t ... y ... city, where th ... d ... for last ... nil ... i ... is not there  
 yet. This ... i ... e ... that th ... r ... for man- ... chnology is rathe ... small

in North America at this time. Many methods could be used for putting fiber once human could enter the sewers. For fixing the expansion anchor, a hole must be drilled into the sewer wall, which would pose no major structural problems as long as there is adequate wall thickness in sewers with a 800mm dia. and above. The cables can be added in the future as demand for the fiber count increases. This technology has been in use for some years. In Tokyo alone, there is over 700 km of such fiber installations in man-entry sized sewers for the longest duration, more than any other city in the world. And in Vienna, there is over 400 km of man-entry fiber using CableRunner. 10. More Ways For Fiber In Sewers CableRunner uses a drill and dowel system in sewers of 250 to 700 mm in size. DTI CableCat uses either a back-reamed anchor or an adhesive bed system in sewers of sizes 200 to 1200 mm, while Nippon-Hume and RCC use drill and dowel systems for the same sized sewers. In addition, there are liner systems vying to do some of this as part of routine sewer maintenance programs. There is a good chance that these liner companies will succeed if they are able to offer value-added relining systems for an attractive incremental fee to the city sewer agencies over the standard lining systems without cutting too much into the current functions of the sewers. The author is also aware of a number of other new technologies for building optical fiber networks in sewers. For example, see US patent No: 6,301,414 issued on October 9, 2001 to a group of optical fiber experts from Alcatel [56]. DTI-CableCat has filed for patents to protect its adhesive bed-based robot. Nippon Hume, Consec. TMG, and TMSSC have jointly applied for new patents to protect their new C and W anchors and new modular robots, shown in Figure 1. Figure 1: New Nippon Hume Robot TMG, Corning Cable Systems MCS-Drain, shown in Figure 2, and Ashimori Industries' offering to use tensioning devices to span the optical fiber cable manhole to manhole to anchor them on the walls of the manhole are quite similar. A typical technology to build optical fiber ducts as part of relining a sewer is shown in Figure 3. 11. Optical Fiber In Natural Gas Pipes Sempra Fiber Links [49], Alcatel [44], and Gastec [10] are three companies offering new technologies to install optical fiber cables in natural gas pipes. In Sempra's technology, special fittings are attached after tapping the gas main at two locations to form the entry and exit points for the optical fiber. The gas mains could be even as small as 25 mm in size and the fiber conduit Figure 2: Corning's MCS Drain System Figure 3: Building Optical Fiber in Liners will take up to no more than 10% of gas flow area. In the event a particular gas line cannot handle even a 10% reduction in capacity, additional pipe capacity will be added according to Sempra. In this author's opinion, if the additional pipe capacity is needed then this approach offers little advantage over the traditional dedicated conduit for placing the optical cable. A small HDPE conduit is threaded through the entrance fitting until it reaches the exit fitting. A special tool is used to grab hold of the threaded conduit and pull it out through the exit fitting. Once this housing conduit is placed in the gas main, the optical fiber cable is pushed through this conduit from one fitting to the next. The fittings and seals are designed to meet all gas pipeline safety requirements of the U.S. DOT, CFR 49, section 192 and any local regulations such as California PUC General Order 112-E. Sempra reports that a crew of 5 to 7 workers can install up to 600 m per day. In the Alcatel system, a balloon device is used to pull a specially designed optical fiber cable through the Inlet port clear through the Outlet port shown using a gas pressure differential. The cable itself has a special metallic barrier, to prevent hydrogen gas migration to cause the optical fiber strands going blind. Again, the seals and the ports are designed to meet various safety regulations. More details could be found in Leppert et al. [44]. Gastec

offers a solution where a specially designed shuttle pulls a cord from an inlet attached to the gas main all the way to the exit port using a gas pressure differential. This is done by creating an overpressure of about 150 mbar at the inlet side while a negative pressure is created by flaring off gas through a venting safety valve at the outlet side. An added benefit of fiber in gas deployment is that a few strands of the fiber could be used as a leak detection system by collecting spatial resolution data. The fiber in gas solution as introduced by Alcatel is shown in Figure 4. 12. Fiber in Drinking Water Pipes Drinking water pipelines also enter most buildings. All fiber cable materials must meet EPA regulations on drinking water. In typical metropolitan regions, numerous valves exist in the drinking water pipeline and are bypassed with the cable. Ideally, each of these bypasses forms a fiber POP. A cable entry point consists of a water pipe flange and a sealed cable inlet. The flange is installed on the water conduit under normal operating conditions and the water flow is interrupted only for the actual cable insertion. The cable is installed by means of a rope, which is fed into a flange Figure 4: Alcatel's Optical Fiber Cable in Natural Gas Mains and floated to the next flange as shown in Figure 5. The cable is then attached to the rope and pulled manually into the pipe. In drinking water pipeline systems, cablepulling sections are on the order of 250 meters in length, although some additional cable is stored in the small manhole above each valve to accommodate future fiber links. Fiber in drinking water pipes is also inexpensive and every valve is a potential customer connection point. There have been many installations of communication networks in active or abandoned drinking water pipes going as far back as 100 years. Figure 5: Alcatel's Optical Fiber Cable in Drinking Water Pipes 13.

Standardization Over 300 stakeholders from 30 countries have joined together to form new ASTM Committee F36 on Technology and Underground Utilities. The group is in the process of developing standards for the deployment of fiber-optic cables in underground utilities, pipeline rehabilitation methods, and seismic risk assessment procedures. Participants in the new committee include municipal authorities, building owners, robot-manufacturers, pipe manufacturers, optical-fiber cable manufacturers, telcos, and construction, architectural and engineering consultants, to name just a few. This committee usually meets in January and June. Although attendance of members is always preferred because of its value in networking, participation is still encouraged via web forums, teleconferences, emails, and regular correspondence. Similar efforts are underway to develop engineering guidelines within ASCE for this 130,000-member organization of civil engineers to provide their input to the telecommunications industry in this new discipline. There are a number of FTTH projects underway nationwide as reported in Table 3 and additional communities have undertaken feasibility studies on FTTH deployments since August 2002. Many of the techniques reported in this paper could be used to lower the overall cost of FTTH deployments while cutting the construction time by a substantial percentage. It should be borne in mind that the inclusion of additional conduits to carry optical fiber either inside or outside of utility pipes planned in new construction projects would add minimal cost to the overall design and construction of conduits in the ground. Therefore, consideration of such utility corridors is a must in every new construction project with provisions to serve multiple functions.

Table 3: U.S. Optical Fiber Communities -August 2002 State Development, City or County Area currently planned CA Poppy Meadows-American Canyon Development CA Palo Alto Trial area CA Roseville Entire municipality CA Sacramento Part of municipality CO Colorado City Entire municipality CO Rye Entire municipality FL LPGA Community-Daytona Beach Development GA

Dunwoody-Atlanta Development IA Guthrie Center Entire municipality IA Huxley Entire municipality IA Cambridge Entire municipality IA Slater Entire municipality ID Bear Creek-Meridian Development KS Almena Entire municipality KS Hill City Entire municipality KS Osborne Entire municipality KS Norton Entire municipality MN Morns Entire municipality MN Alberta Entire municipality MN Chokio Entire municipality MN Evermoor-Rosemount Development MN Town Lakes-Albertville Development MN East Ottertail Entire municipality NE Greenfield Addition-Blair Development OR Woodburn Entire municipality PA Kutztown Entire municipality SC Daniel Island-Charleston Development SC Sandy Point-Bluffton Development TX Avery Ranch-Austin Development TX Burleson Part of municipality TX Laredo Part of municipality TX Canyon Gate Brazos-Houston Development TX Hometown-North Richland Hills Development TX Lakes on Eldridge-Houston Development TX Northpointe-Houston Development TX Rock Creek-Houston Development TX Stone Gate-Houston Development TX Grand Lake Estates-Houston Development TX Victory Lakes-Houston Development TX Crystal Falls-Leander Development UT Kamas Part of municipality UT Provo Trial area VA Southern Walk at Broadlands-Ashburn Development VA Lansdowne on the Potomac-Leesburg Development VA Braemar-Bristow Development WA Chelan Co. Trial area WA Douglas Co. Entire county WA Grant Co. Entire county WA Issaquah Highlands-Seattle Development WA Mason Co. Entire county Source: Render, Vanderslice & Associates **14.**

Conclusions

1. Qwest, Level 3, 360 Networks, Broadwing, and others have all offered to provide end-to-end optical network and true broadband to the masses. The world is hungry for bandwidth and the established rules of many telecom companies have led to a meltdown. **It's** time to consider new rules and new partners to recoup the investment into long haul and backbone fiber.
2. Removing the last mile bottleneck to generate the voice/video/data traffic needed to solve the fiber glut will involve creative business partnerships with existing utility pipe owners.
3. U.S. EPA rules have required most cities to upgrade their sewers and waterlines in the coming years. It appears that a viable partnership could be arranged among telcos, pipe owners, service providers, and vendors, where each party has something to gain by cost sharing.
4. The installation of optical fiber cables inside of sewers, waterlines, and gas pipes is a major breakthrough in sharing the underground pipes so that the end-to-end optical fiber offer from the above major players could materialize faster than in dedicated fiber conduits. However, telecommunication companies need to address all the concerns associated with using existing pipes, before wide spread fiber deployment could proceed.
5. Working in the sewer, water, or gas pipe will affect the health, safety, and welfare of the people we serve and any shortsighted approach to selecting the suitable sewers or gas pipes for installing and operating optical fiber cable, would expose all those in this new industry to an enormous liability. Developing sound engineering standards to guide this new industry falls well within this obligation.
6. The factors which will continue to provide momentum for the market are: ???Aging underground infrastructure ???Doing more work with less funds ???Protecting the environment ???Increasing congestion in urban and suburban centers ???Faster rate of technology transfer and information ???Privatization of utility companies
7. Not all sewers, waterlines, and gas pipes are amenable for installing optical fiber cables and companies which support strong engineering talent on their staff will focus their attention to those lines which would satisfy proper engineering criteria.
8. The deployment of optical fiber cables in existing pipelines offers a win-win situation for all parties involved if proper standard of care is afforded. However, working in sewers and natural gas pipes requires sound pipeline engineering input and anything less than that would be shortsighted. If

telecommunication companies did not follow proper engineering know-how, it would only be a matter of time before we will face major problems and the cost to return these sewers, waterlines, and gas lines to normal working order would be far greater than the lease revenue fiber installers are offering at the present time. 9. For telecom carriers and network service providers, it's a true, end-to-end lastmile optical fiber network, which they could control. For sewer, water, and gas pipe owners, it's a unique and powerful economic development tool, providing added revenue from an existing infrastructure, and of course protection from most damage to roads and disruptions to traffic. And for building owners, it provides a major upgrade for their buildings for free, and that brings extra value to the buildings.

10. The author is spearheading a Task Committee within ASCE to develop Engineering Guidelines on Installing and Operating Optical Fiber Cables in Sewers. Likewise, he is leading standardization efforts within ASTM International. Anyone with information, data, or case histories that would help these committees carry out their mission is invited to contact the author to become a member of these committees. 11. The problem of last mile bottleneck in America is so similar to the lack of health care to many Americans. It has never been either the lack of funds when we pool our nation's resources or the lack of technology know-how. As long as we continue to support various interest groups, we will continue to fall behind in our quest to be the global leader in providing true broadband to the masses. 15. References [1] Alcatel, Ka-Te, and IK-T (1998), "FAST - Das schnelle Modulsystem für zukunftsichere **Telekommunikations-Kabelnetze**" Informationsbericht der Fa. Alcatel Kabel AG, Monchengladbach. [2] Berliner Wasser Betriebe (1997). Patent application on "Method and Device for Inserting, Positioning, and Fixing of Constructional Components Having Different Cross Sections." Applicant: Dr. Klaus Beyer, President of RCC. [3] Beyer, Klaus (2000), "Einbau Von Kommunikationskabeln in Abwasserkanalen," Proc. of the 6th International Pipeline Construction Show, Hamburg, Germany, June; pp. 370-379. [4] Beyer, Klaus (2001), "Personal Communications," Berlin, Feb. [5] Brand-Rex (2002), "Personal Communications," Fife, Jan. [6] CityNet Telecommunications, Inc. (2000), Personal communications, published articles, press releases, and their web site: [www.citynettelecom.com](http://www.citynettelecom.com) [7] Copeland, M.V. and Mali, O. (2002), "Jilted by Broadband," paper in Red Herring, March. [8] Corning Cable Systems (2001), Technical Note on Data Superhighway in the Drain authored by Lothar Finzel. [9] Fujiyoshi, Yoshinobu, and Nomura, Yoshikazu (1996), "The Current Situation and Future of Sewer Optical Fiber Technology in Japan," Research Report by Japan Sewer Optical Fiber Technological Association. [10] Gastec (2002), "Personal Communications," Apeldoorn, Jan. [11] GSTT Nr. 12 (1999), "Leitungsverlegung in vorhandenen Netzen Teil 1: Kabelverlegung in Kanalnetzen, Dec. [12] Hecht, J. (2001), "Fiber Crosses The IO-Trillion-Bit Barrier," paper in MIT's Techreview, March. [13] Japan Sewage Works Association (1997), "Sewage Works in Japan-Sewerage and Optical Fiber Cable," authored by Yasuto Chiba. [14] Jeyapalan, J.K., Jaramillo, C.A., and Saleira, W. (1989), "Design Considerations for a Penstock Located in an Outlet Tunnel at the Jennings Randolph Dam in West Virginia," Proc. of Waterpower '89, ASCE Conference, pp. 426-436. [15] Jeyapalan, J.K., and Jaramillo, C.A. (1989), "Hydraulic Model Tests of Flow Around Penstock Suspended Inside the Tunnel for Design of Small Hydro," Proc. of Waterpower '89, ASCE Conference, pp. 577-587. [16] Jeyapalan, J.K., and Thiagaram, M. (1989). "An Evaluation of the Applicability and Cost of Polyester Resin and Cementitious Grouts for the Installation of Rock Anchors at Hydro Projects," Proc. of Waterpower '89, ASCE Conference, pp. 960-965. [17] Jeyapalan, J.K. (2001), "Fiber Optic Cables Inside of Sewers! Why Not?" paper at UCT. Houston, Texas. [18]

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(2) \*\*\*\*\* Broadband - VoIP - EARTHLINK LAUNCHES UNLIMITED VOICE SERVICE (Dow Jones) March 13, 2003, ATLANTA- EarthLink Inc. launched its EarthLink Unlimited Voice, a voice-over-Internet-protocol service. In a press release Thursday, the Internet-access provider said the service includes free unlimited local, regional and long distance calling for a flat rate of \$39.99 a month. The service includes voicemail, caller ID, call waiting, call return and call forwarding. EarthLink Unlimited Voice provides enhanced telephone service to high-speed cable and DSL subscribers. With the services' area code selection feature, customers are no longer tied to their local area code and can select from a list of over 115 area codes in cities across the U.S.

(3) Cable Modem -CHAIRMAN OF HOUSE COMMERCE COMMITTEE BILLY TAUZIN'S MARCH 11 LETTER TO FCC ON THE "CABLE MODEM IS INFORMATION SERVICE DECISION- ASKING THE FCC TO "CLARIFY THAT ITS DECISION IS PROSPECTIVE AND AFFECTS ONLY (CITY-CABLECO) CONTRACTS SIGNED AFTER THE ISSUANCE OF ITS RULING. Otherwise, local governments will be exposed to future claims and significant risk" if cable TV system operators seek reimbursement from local governments for past franchise fee payments. Of course, Mr. Tauzin, in line with his previous unsuccessful "regulatory parity" regulation, apparently agrees with the "information service" classification.

(3) Cable Modem - HOW BELLS LOST TO CABLE IN BROADBAND (WSJ) Missed opportunities, technical glitches and strategic missteps have left the nation's local phone companies far behind cable companies in the race to wire U.S. homes for high-speed Internet access.

Full Story: <http://online.wsj.com/technology/telecommunications?mod=2%5F0018>

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Full Story:

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(5) Content - E-Commerce Taxes - STUDY SAYS INTERNET TAX LOSSES OVERSTATED (Reuters) U.S. states lost \$2.8 billion last year in uncollected Internet sales taxes, much lower than previous estimates, according to a study released by a business group on Thursday.

Full Story:

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(6) Content - E-Govt - LIKE ONLINE DATING, WITH A POLITICAL SPIN (NYT) By Lisa Napoli- Hundreds of people turned out in New York last week to hear a presidential candidate at an event organized not by his campaign staff but by a Web site.

Full Story:

<http://www.nytimes.com/2003/03/13/technology/circuits/13meet.html?th>

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Full Story:

[http://story.news.yahoo.com/news?tmpl=story2&ncid=1212&e=9&u=/nm/20030313/wr\\_nm/crime\\_britain\\_porn\\_dc&sid=95573503](http://story.news.yahoo.com/news?tmpl=story2&ncid=1212&e=9&u=/nm/20030313/wr_nm/crime_britain_porn_dc&sid=95573503)

(8) Content - Filtering - PORNOGRAPHY PREVALENT ON FILE-SHARING SERVICES (WashPost) Popular Internet services that allow computer users to swap music and video clips also are an easy and free-flowing conduit for pornography, including images of minors.

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<http://story.news.yahoo.com/news?tmpl=story2&ncid=1212&e=11/ap/20030313/ap>

[\\_on\\_hi\\_te/internet\\_gambling&sid=95573501](#)

(10) Content - Gaming -SPRINT TO LAUNCH WIRELESS MULTIPLAYER GAMING (Reuters) Wireless carrier Sprint PCS Group plans to offer multi-player gaming on its network beginning next month, with features much like online PC or console video games.

Full Story:

[http://story.news.yahoo.com/news?tmpl=story2&ncid=I293&es=1/nm/20030313/tc\\_nm/telecoms\\_sprint\\_games\\_dc&sid=95573419](http://story.news.yahoo.com/news?tmpl=story2&ncid=I293&es=1/nm/20030313/tc_nm/telecoms_sprint_games_dc&sid=95573419)

(11) Content - ONLINE YELLOW PAGES - Recycle those old fashioned, tree-eating, shelf-space-gobbling Yellow Pages. Link to the online Yellow Pages from the Netscape home page under "Tools." Search any area of the U.S., sort results by distance and print a map. Let your fingers do the walking online.

Full Story: <http://yp.netscape.com/>

(12) DSL Service - EUROPE ROLLS OUT DSL FOR VIDEO (WSJ) Europe's tech and telecom players are betting on a decade-old technology -- DSL -- for transmitting video over phone lines to help steer their way out of the sector's doldrums.

Full Story: <http://online.wsj.com/technology/telecommunications?mod=2%5F0018>

(13) DSL Service - COVAD SAYS IT WILL BE PROFITABLE THIS YEAR - DSL PROVIDER REPORTS A LOSS FOR 4TH QUARTER (Chronicle) By Todd Wallack, March 12, 2003- Despite a major regulatory setback last month, Covad Communications Tuesday stood by its prediction that the Santa Clara DSL provider will have a positive cash flow later this year.

"Nothing has changed," said Covad chief executive Charles Hoffman. "Business is better than ever." Hoffman said the high-speed Internet provider will become profitable in the first half of this year -- meaning that not counting interest, taxes and **some** other deductions, it will show a profit. The company should generate cash six months later, he said. Covad's stock lost half its value last month after the Federal Communications Commission narrowly voted to phase out line-sharing rules, which allow Covad to rent the high-frequency portion of telephone lines that are already being used to handle voice calls.

By using voice lines to carry DSL, Covad avoids the hassle and expense of installing new phone lines and pays a lower monthly fee.

Prior to the announcement, Covad shares closed at 67 cents Tuesday, far below its 52-week-high of \$2.60. Hoffman pointed out that federal regulators said the line-sharing regulations would be phased out during three years. By then, Hoffman said, Covad may be able to use an alternative technology, such as wireless, to deliver high-speed Internet service. (Hoffman cautioned that the FCC still hasn't released the details of the decision.) The FCC ruling itself is also in doubt, because Covad and others plan to challenge the decision to toss out line sharing. And Covad also is hopeful that it can reach agreements with local telephone companies to continue leasing the high-frequency portion of voice lines. Covad had an agreement with SBC Communications, the nation's second-largest local phone company, to rent the high-frequency portion of the phone lines for about \$5 per month.

And SBC Communications chief executive Ed Whitacre said he has no problem

allowing Covad to continue to share the lines for roughly that price in the wake of the FCC decision. However, Whitacre said, he opposes the decision by regulators in California and some other states to let Covad use the lines for free. Verizon Communications, the largest U.S. local phone company, may be **less** hospitable.

Verizon chief executive Ivan Seidenberg told The Chronicle last month that he is willing to work out a deal to let Covad **use** the lines only temporarily. "If Covad has a strategy . . . to migrate their business to a fiber-optic network (or some other technology), that's a very reasonable thing for them to talk about," Seidenberg said. "If they don't have a strategy to migrate to a future technology, then it's a whole different question." Separately Tuesday, Covad reported that it lost \$35 million in the fourth quarter, compared to an \$859 million profit a year ago. (The 2001 earnings were boosted by a one-time elimination of debt via bankruptcy.) Revenue decreased by 2 percent to \$88 million. Covad said it has 381,000 data lines, a net gain of 23,000 during the fourth quarter. Covad predicted its first-quarter revenue will be \$90 million to \$92 million. And it will go through \$30 million to \$35 million.

Full Story:

<http://sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2003/03/12/BU184580.DTL&type=tech>

(14) Ultra Wideband - FCC OKS UWB USES (GPS World) March 1, 2003 In a potentially damaging blow to GPS industry and users, the U.S. FCC adopted an Order authorizing operations of ultra-wideband (UWB) devices, and denied a petition from manufacturers and organizations concerned about demonstrated interference by UWB devices with GPS signals. The denial forms part of a major FCC initiative to encourage low-power UWB communications. While acknowledging potential problems with UWB radar devices and calling the FCC's continued refusal to make available test data on UWB digital circuitry emissions "a retreat into darkness," Charles Trimble, the U.S. GPS Industry Council (USGIC) chair termed the agency's experiment allowing unlicensed low-power UWB communications above 3.1GHz "a positive move." Generated as a sequence of very short pulses, UWB signals spread over a large part of the radio spectrum, including portions already occupied by existing services. UWB proponents tout potential benefits in imaging buried objects or those behind walls, in shortrange, high-speed data transmission, and in covert communications. (See September, 2001 GPS World for tests on UWB interference and further background.) Denial. A group including the American Congress on Surveying and Mapping, Boeing, Garmin, NavCom Technology, Nortel, NovAtel, Rockwell Collins, Trimble, three airlines, and the U.S. GPS Industry Council had petitioned the FCC to review and reverse an equipment authorization to Time Domain Corporation of Huntsville, Alabama. The September, 2002 ruling allowed the company to **sell** its PulsON radio communications device to UWB developers. The petitioners claimed the device radiates a signal exceeding FCC limits. The FCC found that, although the device radiates such a signal, it is not an intentional antenna emission, and **so** allowed it. Secret Tests. FCC engineering and technology chief Edmond Thomas stated that the FCC will begin testing to evaluate potential interference of UWB devices with other spectrum users. He said his office would consult with NTIA "and possibly the Department of Defense," but refused to release the test plan for public comment until after announcement of test results. Industry Voice. Trimble argued that "when you scrape everything away, the bulk of the ruling is favorable. A line in the sand has been drawn at 3.1GHz to protect critical wireless infrastructure. We regard the FCC's move to deregulate

very-low-power bandwidth for UWB communications above 3.1 as a positive measure. The opportunities opened up for networked communications and mobile Internet access are really very exciting.

Full Story:

<http://www.gpsworld.com/gpsworld/article/articleDetail.Jsp?id=49397>

(15) VoIP - DOCUMENTS FROM FLORIDA PSC STAFF WORKSHOP (Thanks John Mann)

January 27, 2003- Industry Comments (Note - these won't work until tomorrow): (1) AT&T Communications of the Southern States, LLC;

<http://staging.floridapsc.com/industry/telecomm/voip/voip-att.pdf> PDF file size = 4.8 MB); (2) BellSouth Telecommunications Inc.

<http://staging.floridapsc.com/industry/telecomm/voip/voip-bellsouth.pdf> PDF file size = 489 KB); (3) Florida Cable Telecommunications Association & Southeastern Competitive Carriers Association

<http://staging.floridapsc.com/psc/dockets/index.cfm?event=transferFile&fileSize=712707&fileName=03%5C02050%2D03%5C02050%2D03%2EPDF> (PDF file size = 713 KB); (4) Level 3 Communications, LLC

<http://staging.floridapsc.com/psddockets/index.cfm?event=transferFile&fileSize=26022893&fileName=03%5C02051%2D03%5C02051%2D03%2EPDF> (PDF file size = 24.8 MB); (5) net2phone

<http://staging.floridapsc.com/industry/telecomm/voip/voip-net2phone.pdf> (PDF file size = 1.6 KB); (6) Small LECs: ALLTEL, Florida Inc., Frontier

Communications of the South, Inc., TDS Telecom/Quincy Telephone Company and Smart City Telecommunications

<http://staging.floridapsc.com/psc/dockets/index.cfm?event=transferFile&fileSize=464127&fileName=03%5C02041%2D03%5C02041%2D03%2EPDF> (PDF file size = 465 KB); (7) Southeastern Services, Inc.

<http://staging.floridapsc.com/industry/telecomm/voip/voip-ssi.pdf> (PDF file size = 1.1 MB); (8) Sprint

<http://staging.floridapsc.com/psddockets/index.cfm?event=transferFile&fileSize=581519&fileName=03%5C02047%2D03%5C02047%2D03%2EPDF> (PDF file size = 582 KB); (9) Transcript of 1/27/03 VoIP Workshop

<http://staging.floridapsc.com/psddockets/index.cfm?event=transferFile&fileSize=3752191&fileName=03%5C01102%2D03%5C01102%2D03%2EPDF> (PDF file size = 3.7 MB); (10) Verizon Florida, Inc.

<http://staging.floridapsc.com/industry/telecomm/voip/voip-verizonfl.pdf> (PDF file size = 975 KB);

(11) WorldCom Inc.

<http://staging.floridapsc.com/psddockets/index.cfm?event=transferFile&fileSize=350565&fileName=03%5C02033%2D03%5C02033%2D03%2EPDF> (PDF file size = 351 KB)

WebPage -

Full Story: <http://floridapsc.com/industry/telecomm/voip/index.cfm>

(16) VoIP - PPT Presentations From the NARUC Winter Meetings (Posted at the following URL:)

Full Story: <http://www.naruc.org/committees/telecom/resources.shtml>

(17) WiFi -WIRELESS LAPTOP ACCESS IN PUBLIC TOUTED (AP) Mar 13, 2003-

Public wireless networks are sprouting daily in hotels, cafes and airports.

But which network is available where - and will a given laptop be able to log on?

Full Story:

[http://story.news.yahoo.com/news?tmpl=story2&ncid=1293&e=4&u=/ap/20030313/ap\\_on\\_hi\\_te/europe\\_tech\\_show&sid=95573418](http://story.news.yahoo.com/news?tmpl=story2&ncid=1293&e=4&u=/ap/20030313/ap_on_hi_te/europe_tech_show&sid=95573418)

(18) WiFi - INTEL'S BARRETT PAINTS AN UNTETHERED WORLD (TECHWEB) Mar 12, 2003- Intel's CEO introduces his Centrino wireless chip amid the debut of several laptops that will use the Centrino.

Full Story:

[http://story.news.yahoo.com/news?tmpl=story2&ncid=1293&e=5&u=/cmp/20030312/tc\\_cmp/iwk20030312s0012&sid=95573432](http://story.news.yahoo.com/news?tmpl=story2&ncid=1293&e=5&u=/cmp/20030312/tc_cmp/iwk20030312s0012&sid=95573432)

(19) WiFi - WI-FI NETWORKS ARE ON A ROLL; BUT THERE ARE STILL BUMPS IN THE ROAD, EXPERTS SAY (USA TODAY, CNET News.com) Growing from grass roots efforts by technology enthusiasts to applications deployed by many companies, Wi-Fi networks are growing faster than many researchers projected. But, they say, there are still issues to be resolved including pricing for the service, roaming among networks, and security. Analysts point to price reductions by T-Mobile USA for its Wi-Fi service in Starbucks coffee houses, and the decision by Joltage to discontinue service because it was taking too long to acquire enough customers for the company to sustain itself. Companies are still learning from the market what customers are willing to pay for access to the wireless networks. Also, if travelers use laptops to connect to a Wi-Fi network at an airport, to another at a cafe, and a third at a hotel, they are likely to receive three different bills. Companies such as Boingo Wireless are working on ways to let users roam from one network to another, but it is taking a while for such services to become widely available. Businesses, in particular, remain wary of Wi-Fi networks, concerned that they don't meet their requirements for security.

(20) WiFi - NEW CHIP FROM INTEL AID WIRELESS WEB (NYT, REUTERS) March 13, 2003- Intel introduced a set of chips that promises to make wireless Internet access a standard feature on laptops.

Full Story: <http://www.nytimes.com/2003/03/13/technology/13CHIP.html?th>

(21) WiFi - EDITORS PERSPECTIVE - MORE COFFEE -By Jason Ankeny, March 12, 2003- Last week's **On the Air** column analyzing T-Mobile's efforts to sell Wi-Fi services through Starbucks brewed up quite a bit of response. I argued that even after a recent price cut, the T-Mobile/Starbucks Wi-Fi service is still just too expensive, especially in the face of **so** many free Wi-Fi networks. I also contended that Starbucks isn't doing enough to market the service to its customers. T-Mobile and Starbucks view this state of affairs quite differently. The impetus behind the original column was that I'd never seen anyone actually using Wi-Fi at Starbucks. Neither would divulge subscriber numbers, but Ramirez said he was "very happy with rates of growth," while McMurchy said some Starbucks sites receive as many as 20 unique log-ins per day. She added that Chicago services are behind the national user average, in part because Starbucks Wi-Fi service launched here only recently, months behind the initial August 2002 launch that totaled 1200 locations nationwide. (Starbucks now counts more than 2200 Wi-Fi-enabled locations across the U.S.; that number will grow by 1000 by the end of 2004.) But if no one in my neighborhood is using the service--myself included--then who is? **It's** not a consumer play--we're

targeting independent contractors and consultants, people who work outside of the office or home," McMurchy said. "Wi-Fi is not something 100% of our customers use, so we look at which industries are likely to use the service and focus on them. We're targeting a number of vertical markets, like real estate. Real estate agents are independent contractors and salespeople, which makes the service relevant to them--they don't spend a lot of time in the office." She said Starbucks Wi-Fi enables them to pull up property listings and the like, and that Starbucks is marketing the service to real estate professionals by advertising in trade magazines and attending industry conferences. However, the "mobile professional" model doesn't make sense in the case of my local Starbucks, a site on Chicago's North Side--parking is scarce, for example, which alone virtually guarantees that no worker in the midst of a busy travel day is going to make the time to park the car, walk into Starbucks and begin surfing the Web. That's not the issue, McMurchy said. "We put Wi-Fi in so many stores because we want to make the consumer a promise that you'll have service wherever you go." But how many potential customers even know the service exists? Starbucks does little to promote Wi-Fi in its stores. And there's still the big problem: pricing. The T-Mobile/Starbucks service packages include an annual all-you-can-eat subscription plan at \$29.99 a month and a month-to-month all-you-can-eat plan at \$39.99 a month. That's too expensive. Ramirez said customers get what they pay for. "We have a value network from the standpoints of cost and reliable speed," he said. "There is a T-1 behind every access point--our customers are assured of significant backhaul. Also, security--we are testing and trialing major VPN solutions. There is a single point of accountability and support--less-centralized network models require the involvement of different parties, and the single point of accountability goes out the window." Still--30 bucks a month for Wi-Fi when freenets are another option? "We don't try to combat freenets," he responded. "Freenet providers don't have the wherewithal to do what we're doing. Suppose you're a business customer in a freenet location--you have no idea who you're dealing with. I'm not trying to create fear and uncertainty here, but there's no point of accountability. Besides, we all went through a free lunch model during the Internet boom--that's what got us into the trouble we're in now."

(22) WiFi - WI-FI'S TRAFFIC COPS (Wireless Review) By Kevin Fitchard March 2003- Work at Intel taught Keerti Melkote and Panjak Manglik how to secure networks. At Aruba Wireless Networks they're infusing those principles into their Wi-Fi switch--a brute that tolerates no transgression but is not without its social graces.  
Full Story: <http://www.mailcubed.com/click.asp?x=5939.1327.1588160>

(23) WiFi - WIRTHLIN WORLDWIDE STUDAY SASY WI-FI HOTSPOT SERVICES WILL GENERATE \$3.6 BILLION PER YEAR FROM A PROJECTED 15 MILLION SUBSCRIBERS, CHARGING AN OPTIMAL \$20 PER MONTH

(24) WiFi - WIRELESS LAPTOP ACCESS IN PUBLIC TOUTED (AP) Mar 13, 2003- Public wireless networks are sprouting daily in hotels, cafes and airports. But which network is available where - and will a given laptop be able to log on?  
Full Story:  
<http://story.news.yahoo.com/news?tmpl=story2&ncid=1211&e=7&u=/ap/20030313/ap>

\_on\_hi\_te/europe\_tech\_show&sid=95573371

(25) WPA WiFi - 802.11 SECURITY ISSUES SORTED? (Lightreading.com) HANNOVER, Germany- CeBIT 2003- 802.11 industry organization Wi-Fi Alliance says truly secure, standard wireless LAN products will be available within the next few months based on a preliminary solution called WPA (Wi-Fi Protected Access). The alliance, which has more than 200 industry members, was formed in 1999 to certify standard 802.11 products. Now, nearly 700 products have the stamp of approval. Its next steps are to help introduce greater security (with WPA), start certifying 802.11g (54-Mbit/s over 2.4GHz) products once the .g standard is approved by the Institute of Electrical and Electronics Engineers Inc. (IEEE), and promote the hell out of hotspot availability to help boost use, traffic, and product uptake.. "The IEEE's Task Group i, which is working on a complete security standard [802.11i], will probably complete its work late this year or early next year, but something is needed now to make products secure." Basically, WPA is a security solution comprising the elements already fixed and agreed upon by the IEEE security task group. These include TKIP (temporal key integrity protocol) and Counter Mode with CBC-MAC Protocol (CCMP) for over-the-air encryption, and 802.11x, and access control standard for user authentication and encryption key distribution. It is supposed to be more secure than the current WEP (wired equivalent privacy) security standard that has been proved insecure. Wi-Fi Alliance marketing director Brian Grimm says products incorporating WPA are being tested and should be certified and available in April or May. And just yesterday, Intersil Corp. (Nasdaq: ISIL) announced that it is already making WPA-enabled silicon available to 802.11 vendors (see Intersil Secures WLAN With WPA). AND WHAT DOES THE ALLIANCE THINK ABOUT THE MILLIONS OF 802.11G PRE-STANDARD PRODUCTS ALREADY SHIPPED? "PRE-STANDARD PRODUCTS MAY NOT GUARANTEE A GOOD USER EXPERIENCE. Wi-Fi Alliance has a logo for public access points that it hopes will become a globally recognized symbol. Any hotspot that meets a set of minimum requirements can sport a "WiFi Zone" logo. "About 80 hotspot providers from more than 20 countries already signed up, and anyone can download from our website a spreadsheet of the hotspot locations." Those already in the Zone program account for between 1,600 and 1,700 hotspots around the world, while Grimm believes there are about 10,000 open public access points that anyone can use globally at present. Full Story: [http://www.lightreading.com/boardwatch/document.asp?doc\\_id=29589](http://www.lightreading.com/boardwatch/document.asp?doc_id=29589)

(26) Wireless - 3G - BELLSOUTH TRIAL FUELS BROADBAND EXCITEMENT (Western Wireless) BellSouth today announced that it is testing Navini Networks technology in Daytona, Fla., using the 2.3 GHz wireless communications services band.

Full Story:

<http://email.wirelessweek.com/cgi-bin4/flo/y/hLDjOEaC2wOB410BuDgOAO>

## B. COMPETITION

(1) Access to Capital - General - TECH SHARES RALLIED THURSDAY (WSJ) as investors took heart in some positive developments on the war front and decided to snap up a few bargains, lifting the Nasdaq 2.4% by early afternoon. Telecom stocks made a valiant showing, but a restatement slammed shares of H-P.

Full Story: [http://online.wsj.com/technology?mod=1\\_0013](http://online.wsj.com/technology?mod=1_0013)

(2) Access to Capital - AOL - AOL'S BOOKS UNIT DREW THE INTEREST OF BERTELSMANN AND PEACOCK IN THE FIRST ROUND OF BIDDING, BUT NORTON GROUP CORP. DIDN'T JOIN THE FIELD. (WSJ)

Full Story: [http://online.wsj.com/technology?mod=1\\_0013](http://online.wsj.com/technology?mod=1_0013)

(3) Access to Capital - Nokia - NOKIA PLANS TO UNVEIL SEVERAL NEW MOBILE-PHONES NEXT WEEK (WSJ) at a New Orleans trade show, including a fashion model with a color screen and FM radio. The company inadvertently revealed **some** details earlier this week.

Full Story: [http://online.wsj.com/technology?mod=1\\_0013](http://online.wsj.com/technology?mod=1_0013)

(4) Access to Capital - Philips Electronics - PHILIPS ELECTRONICS PLANS TO CUT 1,600 JOBS IN THE U.S. AND EUROPE AND CLOSE SEVERAL PLANTS (WSJ) as part of a bid to return its chip division to profitability by the fourth quarter.

Full Story: [http://online.wsj.com/technology?mod=1\\_0013](http://online.wsj.com/technology?mod=1_0013)

(5) Access to Capital - RCN - RCN POSTS NET LOSS, CFO TO LEAVE IN 2ND QUARTER (Reuters) Mar 13, 2003- RCN Corp., a telecom and data services provider, posted a quarterly **loss**, reversing a year-ago profit, and said its chief financial officer was leaving for personal reasons.

Full Story: [http://story.news.yahoo.com/news?tmpl=story2&ncid=1293&e=2&u=/nm/20030313/tc\\_nm/telecoms\\_rcn\\_earns\\_dc&sid=95573419](http://story.news.yahoo.com/news?tmpl=story2&ncid=1293&e=2&u=/nm/20030313/tc_nm/telecoms_rcn_earns_dc&sid=95573419)

(6) Access to Capital - T-Online - T-ONLINE LOSSES NARROW TO \$505 MILLION (AP) Mar 13, 2003- T-Online International, the online arm of German telecom giant Deutsche Telekom, says its **loss** narrowed in 2002 as its customer base grew.

Full Story: [http://story.news.yahoo.com/news?tmpl=story2&ncid=1293&e=3&u=/ap/20030313/ap\\_on\\_hi\\_te/earns\\_t\\_online&sid=95573418](http://story.news.yahoo.com/news?tmpl=story2&ncid=1293&e=3&u=/ap/20030313/ap_on_hi_te/earns_t_online&sid=95573418)

(7) Access to Capital - Telecom Italia - TELECOM ITALIA FACES INVESTOR REVOLT (WSJ) Telecom Italia's chairman is facing an investors' revolt over the terms of his proposed merger of Italy's dominant telecom operator and parent company Olivetti.

Full Story: <http://online.wsj.com/technology/telecommunications?mod=2%5F0018>

(8) Access to Capital - Tom.com - TOM.COM POSTS NARROWER LOSS (WSJ) Tom.com net **loss** narrowed last year on lower goodwill provisions and a spate of acquisitions that helped the Hong Kong media and Internet firm more than double its revenue.

Full Story: <http://online.wsj.com/technology/telecommunications?mod=2%5F0018>

(9) Access to Capital - WorldCom - U.S. SEEKS DELAY IN PUBLICATION OF

WORLD.COM REPORT (Washington Post) Federal prosecutors have informally asked WorldCom Inc. to delay the release of an internal investigation into its massive accounting scandal while they examine new evidence that may indicate former chief executive Bernard J. Ebbers was aware the company's profits were based on fraudulent bookkeeping, sources confirmed yesterday.

Full Story:

<http://www.washingtonpost.com/wp-dyn/technology/specials/telecom/>

(10) Accounting Reform -General - FRAUD CHARGES FILED AGAINST 2 EMPLOYEES OF ENRON UNIT (NYT) By Kurt Eichenwald, March 13,2003- Two midlevel employees were charged on Wednesday with engineering a fraud that generated more than \$100 million.

Full Story: <http://www.nytimes.com/2003/03/13/business/13ENRO.html?th>

(11) Accounting Reform -General - TWO ENRON EXECES CHARGED IN BLOCKBUSTER FRAUD CASE (Reuters) Mar 13, 2003- Federal authorities arrested two executives of bankrupt Enron Corp. on fraud charges related to an Internet video-on-demand venture with Blockbuster Inc. that was a failure from its inception.

Full Story:

[http://story.news.yahoo.com/news?tmpl=story2&ncid=1212&e=6&u=/nm/20030313/media\\_nm/enron&sid=95573503](http://story.news.yahoo.com/news?tmpl=story2&ncid=1212&e=6&u=/nm/20030313/media_nm/enron&sid=95573503)

(12) Accounting Reform -General - 2 ENRON EXECES CHARGED IN BROADBAND FRAUD (Reuters) Mar 13, 2003- Federal authorities arrested and charged two Enron Corp. executives with fraud for allegedly creating \$111 million in bogus earnings from a ballyhooed Internet video-on-demand venture that was a failure from its inception.

Full Story:

[http://story.news.yahoo.com/news?tmpl=story2&ncid=1212&e=7&u=/nm/20030313/wr\\_nm/enron\\_broadband\\_dc&sid=95573503](http://story.news.yahoo.com/news?tmpl=story2&ncid=1212&e=7&u=/nm/20030313/wr_nm/enron_broadband_dc&sid=95573503)

(13) Accounting Reform - Worldcom - RICHMOND, VA., LAW FIRM JOINS WORLD.COM CLASS-ACTION LAWSUIT NETWORK (Richmond Times - Dispatch) March 13,2003-A small Richmond law firm is part of a network seeking customers of Salomon Smith Barney who lost money on WorldCom stock. Epperly, Follis & Schork has placed advertisements to advise customers of the brokerage that it is willing to represent them if they lost money on the telecom giant that imploded and filed for bankruptcy last year. Craig M. Follis said his firm is affiliated with Florida-based Hooper & Weiss and has had 75 to 100 responses to its ads. Robert Weiss said Follis' firm is one of about 25 working together on behalf of investors. Although more than 100 class-action lawsuits have been filed on behalf of WorldCom investors, none has been certified, Weiss said. The suits generally allege that the brokerage misled investors because of the close personal and business relationship between Salomon analyst Jack Grubman and WorldCom executives. Grubman touted WorldCom stock until shortly before the company filed for protection.

Full Story: <http://www.timesdispatch.com>

(14) Accounting Reform - Worldcom - WORLD.COM REPORT DAMAGES EBBERS (WSJ) A WorldCom report is raising suspicions that ex-CEO Bernard Ebbers knew about

fraudulent accounting. Prosecutors asked the firm to delay releasing the report.

Full Story: <http://online.wsj.com/technology/telecommunications?mod=2%5F0018>

(15) Arbitrations - Responding to 12(b)(5) Motions for summary Judgement, Md. District Court Dismisses Section 1983 Claims Against MD Commission in VERIZON MARYLAND INC., f/k/a BELL ATLANTIC-MARYLAND, INC. v RCN TELECOM SERVICES, INC., f/k/a RCN TELECOM SERVICES OF MARYLAND INC., et al., CIVIL NO.: S-99-20619 Count I of the amended complaint alleges that the PSCs decisions in the Second WorldCom and Core Letter Orders that internet-bound calls constitute "local traffic" within the meaning of the relevant agreements are inconsistent with federal law and the parties' intent. Count II alleges that the PSCs concomitant decision to require reciprocal compensation for internet-bound calls in instances where the parties could not agree on rules governing compensation for such traffic likewise violates federal law. Finally, Count III alleges that the Second WorldCom and Core Letter Orders, issued by the commissioners acting in their official capacities under color of state law, deprive Verizon of its federal statutory rights in violation of ' 1983 of the Civil Rights Act of 1871 (" 1983). s remedy, Verizon requests that this Court issue an order: (1) declaring the PSC's decisions unlawful; (2) enjoining all defendants, and all parties acting in concert therewith, from seeking to enforce the decisions against Verizon; and (3) requiring the commissioners of the PSC to order the defendant carriers to refund all monies obtained from Verizon in reciprocal compensation fees for internet-bound traffic. Am. Compl. at 19. 43 It is, this 19th day of November, 2002, hereby ORDERED: 1. That the motion of Defendants Catherine I. Riley, Claude M. Ligon, J. Joseph Curran III, Gail C. McDonald, and Ronald Guns to dismiss the Amended Complaint BE, and it hereby IS, DENIED as to Counts I and II; 2. That the motion of Defendants Catherine I. Riley, Claude M. Ligon, J. Joseph Curran III, Gail C. McDonald, and Ronald Guns to dismiss the Amended Complaint BE, and it hereby IS, GRANTED as to Count III; 3. That the motions of Defendants Global NAPS, Inc., and Core Communications, Inc., to dismiss the Amended Complaint BE, and they hereby ARE, DENIED; 4. That the motion of Defendant Core Communications, Inc., to be dropped as a party from this action, pursuant to Federal Rule of Civil Procedure 21, BE, and it hereby IS, GRANTED, without prejudice to the claims or defenses of any Party; and 5. That the Clerk of the Court send copies of this Order and Memorandum Opinion to counsel for the Parties.

Full Text of Decision:

<http://www.mdd.uscourts.gov/Opinions152/Opinions/verizon1102.pdf>

(16) Data - BellSouth - BELLSOUTH BIDS WEB HOSTING ADIEU -By Lisa DiCarlo, March 12, 2003, NEW YORK- After a disastrous fourth quarter that saw declines in sales, profits and customers, BellSouth today said that it is exiting its problematic Web-hosting business and will partner with IBM to sell services to business customers primarily in the southeastern U.S. For BellSouth the arrangement, for which the companies did not assign a dollar figure, immediately relieves it of the need to spend heavily on upgrades for its two data centers, located in Atlanta and Miami. For two years, BellSouth has cut capital spending as sales have slumped. Sales for 2002 were \$22.4 billion, down more than 14% from \$26 billion in 2000. Capital spending has been cut almost in half in that period, to \$3.8 billion last year. BellSouth

will continue to own the facilities and the equipment, but IBM will assume responsibility for BellSouth's hosting customers, which number "100 plus," says Mark Kaish, BellSouth's vice president of data management. IBM is providing the hosting and application and e-business services, and BellSouth will supply the connectivity and bandwidth.

(17)Data - BellSouth - IBM TO MANAGE BELL SOUTH'S DATA HOSTING (CNET News.com) By Ian Fried, March 12, 2003- Regional telecom giant BellSouth turns over management of its data-hosting business to IBM. Under the deal, IBM will take responsibility for running two BellSouth centers housing data for roughly 100 customers. BellSouth said it turned to IBM because the costs associated with maintaining and upgrading hosting facilities in South Florida and Atlanta became too high. Managing the data centers "was taking a level of expertise beyond where we could afford to keep investing," said Mark Kaish, vice president of data product management for BellSouth. IBM will take responsibility for running the data centers and managing the hosting business, while the two companies will jointly market and sell data services. IBM and BellSouth declined to discuss any of the financial details surrounding the arrangement, including whether IBM will purchase any BellSouth assets. The deal allows BellSouth to get out of a business that it wanted to exit and could help IBM with its long-term effort to appeal to more small and midsize businesses, said IDC analyst Melanie Posey. BellSouth was somewhat late to hop on the Web-hosting bandwagon, Posey said, opening its two Web-hosting facilities in late 2000. Also, as a regional company, it doesn't have the global reach of a company like AT&T, she said. Other companies that saw Web hosting as a potential new arena also have pulled back, notably chip giant Intel, which last year announced it would take a \$100 million charge to exit the Intel Online Services business it launched in 1999.

Full Story: [http://news.com.com/2100-1037-992091.html?tag=fd\\_top](http://news.com.com/2100-1037-992091.html?tag=fd_top)

(18)Data - SMS - ITALIANS GIVE THUMBS UP TO WIRELESS MESSAGES (NY Times) By Frank Bruni, March 13, 2003- SMS text messages sent via cellphones are now so pervasive in Italy that even Pope John Paul II recently joined the club.

Full Story:

<http://www.nytimes.com/2003/03/13/international/europe/13ROME.html?tnemail>

(19)WLN - MORE WALL STREET CONFIRMATION OF THE COMPETITIVE BENEFITS OF WIRELESS WLN -By Blair Levin, Rebecca Arbogast, & David Kaut- (Legg Mason)'s latest report on the November 24, 2003 Deadline for Wireless WLN Today says

(1) In spite of their violent opposition, the wireless carriers are nevertheless preparing for a Nov. 24 implementation deadline. (2) They don't expect the FCC to grant another extension, though a pending industry court challenge could still throw a wrench into the regulatory machinery. (3) WHILE WLN IS LIKELY TO INCREASE CHURN GENERALLY, WE BELIEVE CARRIERS WITH THE MOST MATURE SUBSCRIBER BASES (I.E., CELLULAR) AS WELL AS EXPOSURE TO THE BUSINESS MARKET FACE THE GREATEST RISK, AS THOSE CUSTOMERS ARE MORE INVESTED IN KEEPING THEIR PHONE NUMBERS. (4) Carriers are very focused on defining business rules - such as porting fees, receivables balance, and contract cancellation fees - that may minimize the impact on churn once WLN is implemented. (5) We believe Verizon's and Nextel's networks and product differentiation will give those carriers distinct advantages in holding on to customers and taking share from others.

(20) Rebalancing -WATCH YOUR WALLETS: TALLAHASSEE'S ON THE LINE (Times Columnist [Commentary]) By Howard Troxler, March 12, 2003, TALLAHASSEE- Last spring, your good friends in the Florida Legislature voted to help you by raising your local telephone rates. Even in an election year, the influence of Florida's telephone companies was **so** strong that the bill sailed through. It was stopped only by the veto of Gov. Jeb Bush Well, now it's next year. It is an odd-numbered year, too, with no election looming. Our lawmakers have even less reason to fear the voters. Already, several "shell" bills have been filed in the Legislature. The basic problem is this: If we really want local phone service to become more "competitive" in Florida, then somebody has to pay more money. Everybody up here pretty much thinks that it ought to be you, the residential customer. Local phone companies say that we local customers are just an awful burden to them because they don't charge **us** enough. It is sweet, really, how much they have carried us. The long-distance companies, meanwhile, do not like having to pay high "access" charges to connect to the local company, especially for in-state calls. So the mantra is that telephone rates need to be "rebalanced." That's what last year's bill tried to do. It cut the charges that long-distance companies had to pay to local companies. Then it let the local companies make up the lost cash by charging it to you. You know. "Rebalanced." The **official** story was that residential customers would break even because the long-distance guys would cut rates. Riiiiight. That ignored the fact that some customers make few or no long-distance calls to begin with. Besides, there was no guarantee in the bill that rates couldn't be raised again the next day. The real problem is that Florida does NOT have a truly competitive market for residential phone service, and nobody has a good idea of how to create one. All of the attempts **so** far, in 1995 and 1999 and last year, were ham-handed cash grabs by the existing telephone companies. Let **us** take more of your money, the phone companies say, and the market will become more competitive. Florida will become more attractive to new investors, new rivals. Honest. It is a stale, 8-year-old promise. During these past cash grabs, not many members of the Legislature really understood this issue. Most waited, like they often do in complicated issues, for the insiders involved to strike a "deal." They waited to hear that it was a "good bill" and that everybody had "signed off on it." Then they voted the way their leaders told them. This year the guy in charge of the House committee tells me he is determined for members to develop a working knowledge of the issue. "We're not going to be blindsided by anything presented as a done deal, Mayfield said. I hope he's sincere. Look, the setup for local phone service we have now is not going to survive. It can't. The local companies are losing their business customers to new competitors. In the long run, the most lucrative customers will be "cherry-picked" away, and the doddering old "incumbent" companies will be left holding the bag, even going under. So, yes, let's talk about how to get to the future. But until the Legislature comes up with something a little more creative than, "Let's just stick it to the residential customers," it will keep facing resistance. Rightly **so**.

(21) Toll -SATELLITE PHONES GO TO WAR (Washington Post) By Nicholas Johnston, March 13, 2003- If you think your cell-phone reception is bad in Rock Creek Park, try making a call from a mountaintop in Afghanistan or the Saudi Arabian desert. To keep in touch from those remote locales, a simple cell phone just won't cut it – you'd have to turn to a satellite phone. Now a looming war in Iraq. along with threats to land-based communications

networks, is helping to boost sales and rentals of satellite phones. Companies like seven-year-old WorldCell in Silver Spring, which rents both cell phones and satellite phones, said business has picked up as war with Iraq has apparently drawn closer. Business travelers, particularly those who go to the Middle East and other hot spots, are taking the phones as insurance in case normal networks go down. The military and journalists are also clamoring for satellite connectivity. They all want the phone that's supposed to work anywhere at any time. "Use war as an example," said J.D. Myers II, WorldCell's chief marketing officer. "One of the first things that takes place is they take down communications. Your cell phone is not going to be of any use anymore." Satellite phones were pitched originally to exploration companies and other businesses with employees in the far corners of the globe. But the phones need an unobstructed view of their satellites to make a connection, unlike cell phones, whose signals can travel through walls and other obstacles. That means that although you might have no problem making a satellite phone call from the deck of a ship in the middle of the Pacific Ocean, you won't get through if you're standing in your living room in Reston. So instead of becoming the only phone business travelers need, WorldCell is relied upon by many customers to augment their standard cell phones. Kim Cornett, a producer for MSNBC News, often rents standard cell phones for international travel so she can use the same phone in Kuwait that she does in England. But for a recent trip to the Middle East to do stories from an aircraft carrier, a cell phone wouldn't have been enough. So she tried to rent a satellite phone from WorldCell. "They were all sold out," she said.

Full Story: <http://v.ww.washingtonpost.com/wp-dyn/technology/>

(22) UNE - Triennial Review - FEELING DEPRESSED AND HOPELESS? CONSIDER BELLS' DILEMMA (USA Today) Slammed into a very large guy while playing hockey last night. Did my taxes over the weekend. Caught a cold. Despite all that, I'm not even a fraction as miserable as a local phone company CEO. I know this after meetings with Duane Ackerman, CEO of BellSouth and with Francis McInerney, an often-prescient author and telecommunications research analyst. Ackerman had the calm and generous presence of a lawyer who'd come to read the will and put the family at ease. Mostly, he came to tell us why regulators should do more to protect the Bells. My word, it was so sad that if I wasn't worried about being embarrassed in front of a room of colleagues, I might've teared up. The Bells are not the monopolies the media portrays, Ackerman said. "I've lost 30% to 34% of business customers across our territory - 50% in some areas," he told us, saying he's fighting competition from long-distance companies, start-ups, wireless firms and cable companies. "On the consumer side, we've lost 8% to 9%." Ackerman said he doesn't have the money to modernize to take on new competitors. His stock price is half of its 52-week high. Regulations force him to serve every low-revenue customer while the other companies skim cream. He brought charts with lines and bars going in worrisome directions. He started talking about damage done by "Uni-pee." It's one of those rules that forces Bells to open their markets to competition by leasing capacity on their systems to rivals. Music executives get insomnia over MP3 file sharing. Bell executives sit up nights muttering about Uni-pee. Because it all sounded so grim, I asked Ackerman why anyone would want to own BellSouth's stock. "That's just it - stocks have been pounded in this sector," he said. Policies have got to change, he added, or there will be trouble. How much trouble? That's where McInerney comes in. His firm, North River Ventures, has been saying for some time that the Bells might crater the American economy. Behind the Bells'

pleas, McInerney says, is the reality that their networks are essentially worthless. In this data network era, the Bells' circuit-switched networks are like railroad tracks at the dawn of the jet age. Built for voice, Bell networks carry too little information at too high a cost, and the only way to fix it would be to replace it all. The Bell networks are viable only if monopoly pricing and regulations prop them up. "That's called socialism," McInerney adds. All told, McInerney estimates that the Bells have \$360 billion of obsolete assets on their books. Writing all that off would leave the Bells in financial shambles. They can't do it. But they can't compete, either. Wireless and cable companies, Wi-Fi start-ups, AT&T and MCI - they'll all continue to seep away Bell customers, especially if prices remain artificially high. The Bells' revenue shrank 3.4% in 2002. Yet they have the huge, fixed costs of their networks. As revenue goes down and costs stay up, the Bells have less money for new networks and are less able to lower prices. Before long, McInerney says, some company will offer a homeowner a package of services - maybe by wireless or cable TV lines - for a really low price. "Then you will hear a giant sucking sound," he says. Which would be a heck of a problem, because the Bells employ hundreds of thousands of people. Think of the potential for crushed 401(k)s and defunct pension plans. And if the Bells aren't there, who's going to wire the Texas trailer parks and Kansas farmhouses - places upstarts won't want to serve? As a nation, the USA has a big decision to make. Do we go the socialist route and make taxpayers support the Bells as the Bells turn into the next Conrail? When you come down to it, that's what Ackerman wants. If regulations let the Bells keep their monopolies, the effect is that prices stay artificially high, and we all help pay to keep an outdated system afloat. Or can we be real capitalists, break up the monopolies, open the way for competitors and let the Bells succeed or fail on their own? "Not doing anything would be a disaster," McInerney says. Now you see what's burdening the CEO from BellSouth. It truly seems bleak - for the Bells, for thousands of workers and for the economy. Ackerman and McInerney have managed to make me feel crappier.

Full Story:

[http://www.usatoday.com/money/industries/technology/maney/2003-03-11maney\\_x.htm](http://www.usatoday.com/money/industries/technology/maney/2003-03-11maney_x.htm)

**(23) JUNE - Triennial Review - PHOENIX CENTER SAYS FCC DECISION DIDN'T HARM BELL STOCKS** -By Josh Long (Note: I posted Larry's stuff directly on Monday)

The FCC should not be blamed for driving down the stocks of the Bell operating companies after voting last month to preserve local phone regulations, says one public policy group. The Bells recorded a net gain in market value from the time The Wall Street Journal reported in early January that FCC Chairman Michael K. Powell wanted to eliminate the phone regulations to last month's Feb. 20 vote -- the day the FCC voted three to two to preserve the regulations, according to the Phoenix Center for Advanced Legal & Economic Public Policy Studies. "Assertions that the FCC wiped out billions of dollars in Bell company stock value are dead wrong," said Phoenix Center President Lawrence Spiwak in a news release today. "There were two market-moving events in the final six weeks of the FCC review process. One moved Bell stocks higher and the other caused a decline. When you account for both events, the Bells registered a net gain of \$5.8 billion." The Phoenix Center supports preserving regulations that have allowed AT&T Corp., MCI and others to compete in the local residential phone market with the Bells. The group says it conducted a market cap study focused on "abnormal" stock fluctuations that topped market trends in

eight communications sectors between two events --the day the Journal/i article ran and the day the FCC voted to preserve the phone regulations governing the UNE-P resale platform. Bell stocks rose 8.5 percent Jan. 6 following the Journal report, the largest one day increase in more than a year, according to the Phoenix Center.

Full Story: <http://www.phoneplusmag.com/hotnews/33h11105155.html>

(24)UNE -Triennial Review - Thanks to Rich Higgens for Forwarding IURC TO INVESTIGATE UNE PRICES -March 12 , 2003-Today, in Cause No. 42393 ,the IURC opened its own investigation into the rates SBC charges competitors for use of its unbundled network elements and collocation. The Commission will also review which network elements should be unbundled. The Commission's action in this matter results from the recent order announced by the FCC, which will adopt new rules for the network unbundling obligations of incumbent local phone carriers. The Commission also recognizes that the cost studies used to set the price of making unbundled network elements available to competitors may need to be updated. In this cause, it is the Commission's intent to give companies every opportunity to update relevant costs and market information. The IURC will continue to do its work as mandated by the Telecommunications Act of 1996. A procedural schedule will be set at a later date.

(25)UNE -Triennial Review/Line Sharing - DATA CLEC COVAD "TALKING TO OTHER CLECS ABOUT "LINE SPLITTING ARRANGEMENTS TO COMBINE OTHER "VOICE CLEC LOCA SERVICE OFFERINGS WITH COVADS DSL SERVICE. The UNE order phases out "line-sharing" over 3 years and about half Covad's business relies on such line-sharing arrangements. Company says it would get less revenue from such bundled arrangements, but its costs would also be reduced.

(26)WinBack Promotions - CRTC REVIEWING REGULATIONS FOR ALL LOCAL TELEPHONE MARKET PROMOTIONS - OTTAWA-GATINEAU- The Canadian Radio-television and Telecommunications Commission (CRTC) has expanded the scope of its moratorium on winback promotion applications by incumbent telephone companies in the local wireline market. In today's Public Notice (Telecom Public Notice CRTC 2003-1-1 ,Review of promotions), the CRTC announced that the moratorium now includes applications regarding promotions by incumbents that target their existing customers in the local wireline market. This means that the CRTC has suspended the consideration of all applications for promotions pending its examination of the rules regarding promotions by incumbents. Through promotions, incumbents provide incentives in order to win back customers that have switched to competitors, to retain existing subscribers or to encourage subscribers to try additional features. The CRTC first announced its moratorium in a Public Notice (Telecom Public Notice CRTC 2003-1 ,Review of winback promotions) on January 15th, 2003. The moratorium reflected the Commission's concern about the state of competition in the local telephone market. In 2001 ,incumbent telephone companies had 96% of all local telephone lines and 97% of the corresponding service revenues. In the revised Public Notice released today, the Commission signals its concern that incumbents' promotions targeting existing customers may have a similar effect as winback promotions, thus restraining competition. 'With this amendment to Public Notice 2003-1 ,the Commission emphasizes its commitment to removing any obstacles to fair and sustainable competition in the local telephone market," said Charles Dalfen, Chairman of

the CRTC. Parties to the proceeding announced in January have until March 28th, 2003, to change their original submissions or file new comments about the rules for incumbent promotions in response to the amended Public Notice. The Canadian Radio-television and Telecommunications Commission is an independent public authority that regulates and supervises broadcasting and telecommunications in Canada. Reference documents: Telecom Public Notices CRTC 2003-1-1 and 2003-1  
Full Story: <http://www.crtc.gc.ca>

(27) Wireless - NEXTEL ADDS DIRECT CONNECT CAPABILITIES (Wireless Week)  
Nextel announced today that the first phase of its revamped Direct Connect service is available, allowing Nextel customers who travel to other markets to use their Direct Connect service to talk to people who reside in that market or with other Nextel subscribers who have traveled with them.  
Full Story:  
<http://email.wirelessweek.com/cgi-bin4/flo/y/hLDj0EaC2w0B4I0BuDi0AQ>

(28) Wireless - GSM SUBSCRIBER TALLY GROWS IN THE AMERICAS (Wireless Week)  
According to EMC World Cellular Database, GSM subscribers in the Americas increased 37 percent from September 2001 to September 2002.

Full Story:  
<http://email.wirelessweek.com/cgi-bin4/flo/y/hLDj0EaC2w0B4I0BuDj0AR>

### C. CRITICAL INFRASTRUCTURE/HOMESLAND SECURITY

(1) CyberSecurity - COMPUTER WORM LINKED TO INDIA-PAKISTAN CYBER-SPAT (Reuters) Mar 12, 2003- Hackers claiming to be from India have launched their latest strike in a cyber-spat with Pakistan by unleashing a new variant of the "Yaha" Internet e-mail worm, anti-virus firm Sophos Inc.  
Full Story:  
[http://story.news.yahoo.com/news?tmpl=story2&ncid=1212&e=10&u=/nm/20030312/wr\\_nm/tech\\_worm\\_spat\\_dc&sid=95573503](http://story.news.yahoo.com/news?tmpl=story2&ncid=1212&e=10&u=/nm/20030312/wr_nm/tech_worm_spat_dc&sid=95573503)

(2) Emergency Communications - CUTTING EDGE: CHRIS COLES, GPNS (Wireless Review) By Vince Vittore, Mar 2003- Even in a world of British eccentrics, Chris Coles may be a wee bit mad. Give him a spot of your time and you'll be treated to his ideas on why the big-bang theory is rubbish, how his patents form the basis of today's PDAs, and why the FCC has gone batty in its decisions about competition. But what makes Coles--the president and CEO of GPNS  
Full Story: <http://www.gpns.com> (Global Portable Navigation Systems)--really tick is his concept of video 911. Using two technologies extant in new wireless handsets - digital cameras and global positioning satellite chips - GPNS would allow subscribers to transmit photos and local coordinates to emergency rescue services. Coles' plan began in pre-wireless 1984, when he read about an abduction and murder of two retail workers. Coles began to consider how mobile and positioning technology could help prevent such tragedies.  
Full Story: <http://www.mailcubed.com/click.asp?x=593a.1327.1588160>

D. MERGERS/ACQUISITIONS/ JOINT VENTURE/ ANTITRUST

(1) AT&T Wireless - Cingular - AT&T WIRELESS AND CINGULAR WIRELESS COMPLETE JOINT VENTURE (Dow Jones Newswires) REDMOND, Wash.- AT&T Wireless Services Inc. (AWE) and Cingular Wireless closed a deal to build a global system for mobile communications/general packet radio service targeting more than 4,000 miles of rural highways in the U.S.

An AT&T Wireless spokesman said the terms of the deal are not being disclosed. Originally announced on Jan. 28, 2002, the deal will now include the building of GSM/GPRS networks along major highways in Vermont and New Hampshire, as well as upstate New York, Arizona, Colorado, Kansas, Minnesota, New Mexico, Nebraska, Oklahoma, Texas and Utah.

Full Story:

[http://online.wsj.com/article/0,,BT\\_CO\\_20030313\\_005470,00.html?mod=tel%2Dcts](http://online.wsj.com/article/0,,BT_CO_20030313_005470,00.html?mod=tel%2Dcts)

(2) Media Ownership - FAMILY VALUES LOCAL OWNERSHIP (The Boston Globe) By Clea Simon- The Tanger family in Massachusetts has radio in its blood. Todd Tanger, the third generation of radio owners in his family, recently acquired a classical station from his father. Since radio ownership deregulation began in earnest in 1997, the Tangers have become a dying breed. "It's very tough for the small owners to compete with the large companies that have programming that they can throw out to all their stations," says Tanger, who added that there are fewer owners who are involved in both the station and the community.

Full Story:

[http://www.boston.com/dailyglobe2/072/living/Family\\_values\\_local\\_ownership+.shtml](http://www.boston.com/dailyglobe2/072/living/Family_values_local_ownership+.shtml)

(3) Motorola-Next Level - MOTOROLA BUYS REST OF NEXT LEVEL (Wireless Week) Motorola today announced that it intends to spend \$30 million to purchase the remaining balance of broadband equipment maker Next Level Communications.

Full Story:

<http://email.wirelessweek.com/cgi-bin4/flo/y/hLDjOEaC2wOB410BuDkOAS>

(4) OLIVETTI-TELECOMITALIA MERGER PLANNED (NY Times) By Eric Sylvers, March 13, 2003- Telecom Italia investors reacted with fury to the news, saying the proposed merger would shortchange them.

Full Story:

<http://hnrwww.nytimes.com/2003/03/13/business/worldbusiness/13ITAL.html?ntemai>

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E. SERVICE QUALITY

(1) Billing - BILLING PROBLEMS PERSIST FOR PENNSYLVANIA COMCAST CUSTOMERS (The Patriot-News) By David DeKok, March 13, 2003- Problems with Comcast's new billing system don't seem to be going away. Several customers of the Philadelphia-based cable television giant have called The Patriot-News in recent days to say they are still having trouble making electronic payments

to Comcast through their banks after the new billing system went online Jan. 15. They also said they have been frustrated in trying to get answers after receiving shut-off notices from Comcast along with orders to pay double or triple bills. "We have not, as of this date, received a billing statement from the new system or the promised new account number," said Marian Mills of New Cumberland. "We did not receive a bill at all for February or for March. In February, we did receive a notice of a rate increase. Then we received the famous disconnect notice." Comcast spokeswoman Christine Fitz insisted Wednesday that the electronic funds-transfer problem has been "completely resolved" and affected just a tiny number of customers. She said no customers experiencing billing problems will be disconnected, receive calls from customer service, see late fees on their bills or find negative reports to credit bureaus. Comcast is the only cable TV provider for much of Dauphin, Cumberland and Perry counties, but it is not subject to regulation by the state Public Utility Commission. It faces competition from the two national satellite TV companies, DirecTV and Dish Network, which have been conducting aggressive marketing campaigns in the area.

Full Story: <http://www.patriot-news.com>.

(2) ATBT TO CLOSE DOWNTOWN CHARLESTON, W.VA., CALL CENTER, DROP 99 WORKERS (The Charleston Gazette) By Paul Wilson, March 12, 2003- Ninety-nine employees of the AT&T Call Servicing Center in downtown Charleston will be out of work when the company closes the center in June, according to the union representing the workers. Employees at the call center, located at 816 Lee St., were shocked Tuesday afternoon when they heard the news, said Elaine Harris, an international representative for the Communications Workers of America. ATBT justified the closing by saying the company had "surplus people," Harris said. Similar call centers in Houston and Jacksonville, Fla., will remain open, though others have closed in recent years, Harris said. ATBT representatives could not be reached for comment late Tuesday, and news of the closing was not listed on the company's Web site. Harris said most of the employees are operators, but four service assistants and three managers work at the call center. The employee with the least seniority, Harris said, had worked at the company for 21 years. The cuts will not affect the ATBT telemarketing center at Patrick Street Plaza, Harris said.

Full Story: <http://www.wvgazette.com>

(3) Spam - SPAM'S COST TO BUSINESS ESCALATES (Washington Post) By Jonathan Krim- The flood of unsolicited messages sent over the Internet is growing so fast that spam may soon account for half of all U.S. e-mail traffic, making it not only a hair-pulling annoyance but also an increasing drain on corporate budgets and possibly a threat to the continued usefulness of the most successful tool of the computer age. Spam continues to defy most legal and technical efforts to stamp it out. The surge has spurred calls for national legislation, but deep divisions remain regarding what constitutes spam and how best to regulate it. In the meantime, spammers, Internet providers, company network administrators and anti-spam vigilantes are locked in a ferocious electronic arms race. Many spammers have become so adept at masking their tracks that they are rarely found. They are so technologically sophisticated that they adjust their systems on the fly to counter special filters and other barriers thrown up against them. They can even electronically commandeer unprotected computers, turning them into

spam-launching weapons of mass production. Roughly 40 percent of all e-mail traffic in the United States is spam, up from 8 percent in late 2001 and nearly doubling in the past six months, according to Brightmail Inc., a major vendor of anti-spam software. By the end of this year, industry experts predict, fully half of all e-mail will be unsolicited. (About 40 percent of U.S. Postal Service mail is business marketing.) Many companies with legitimate products rely on the ability to reach millions of existing and potential customers through e-mail, and they argue that their solicitations are not spam. But of the total volume of unsolicited mail pouring into e-mail boxes, much is pornographic, comes from scam artists or contains viruses. According to Ferris Research Inc., a San Francisco consulting group, spam will cost U.S. organizations more than \$10 billion this year. The figure includes lost productivity and the additional equipment, software and manpower needed to combat the problem. Robert Mahowald, research manager for IDC, said his firm estimates that for a company with 14,000 employees, the annual cost to fight spam is 5245,000. And, he said, "there's no end in sight." The front line in the war against spam is inside an unmarked building in Northern Virginia, where a bank of computer screens tracks the volume of e-mail pouring into the system used by America Online's 35 million subscribers. On a recent afternoon, an unexpected spike suggested the work of spammers using one of their favorite new weapons, the "dictionary" attack. With special software, spammers can generate millions of e-mails using combinations of letters and numbers, such as JaneH79, placed in front of the @aol.com portion of the address. Enough are generated that many match real e-mail accounts. That's when Charles Stiles and an anti-spam team take over. Although there are anti-spam laws in 26 states, including Virginia and Maryland, the direct-marketing industry and some Internet retailers have successfully lobbied Congress against a federal law. Microsoft, AOL, Verizon Communications Inc., EarthLink and other Internet providers also are aggressively pushing for national legislation. But prospects for getting a law passed are unclear. Industry and many anti-spam activists are divided over how to combat the problem, and even on how spam should be defined. Marketers of legitimate products worry that their messages are getting lost in the din, threatening what has become a thriving business. Although Web site advertising fell victim to the dot-com implosion, marketing via e-mail has been an Internet bright spot, growing to a \$1.4 billion industry last year, according to Jupiter Research. They filter out as much as they can, act on customer complaints and try to contact as many spam originators as possible. AOL, like all major Internet providers, also offers users additional spam-fighting tools. But some in the anti-spam community are more aggressive, waging a daily electronic war that is largely invisible to the average computer user. At the quieter end of the battlefield, activists such as Chip Rosenthal, a computer consultant in Texas, create e-mail accounts for the express purpose of attracting spam. "If they hit one of my spam traps, I launch probes" to figure out the location of the senders' computers, Rosenthal said. Sometimes, Rosenthal identifies unprotected computers that were unwittingly taken over by a spammer, launching spam without the owners' knowledge. But Rosenthal is part of a loose network of anti-spam advocates whose primary goal is to collect and publicize "blacklists" of spammers' Internet addresses. These are then incorporated into spam filters used by small Internet service providers, company system administrators and individual users, blocking any e-mail that comes from those addresses.

Full Story: <http://www.TechNews.com>

(4) Spam - SPAM'S COST ESCALATES (WashPost) The flood of unsolicited messages sent over the Internet is growing so fast that spam may soon account for half of all U.S. e-mail traffic, making it an increasing drain on corporate budgets.

Full Story: <http://www.washingtonpost.com/wp-dyn/technology/>

(5) Spam - FIGHT SPAM WITH SPAM -By Sean Gallagher, March 6, 2003- An unsolicited proposal to stop the scourge of unsolicited e-mail. David Black has a crazy idea that just might work. Accenture's senior manager of security technology thinks the best way to cut down on spam is to spam back. It's certainly an idea worth trying, if only because nothing else seems capable of stopping the scourge of unsolicited e-mail that tries to hawk everything from home loans to anatomical enhancements. The cost to U.S. companies is probably billions of dollars a year. Matthew Henry, an advanced technology architect at Greenville, S.C.-based capacitor maker KEMET Corp., says spam makes up between 12% and 20% of all e-mail traffic reaching his company's mail gateway each month. Now, AOL Time Warner, Microsoft and even the Direct Marketing Association are all lobbying the government for anti-spam laws. But don't count on legislation to stop the technically inspired. Even spam-blocking technology isn't foolproof. In the long run, the answer is to make creating spam too expensive or difficult. Thus, David Black's modest spam-fighting proposal. AOHell was designed "to hoist AOL on the petard of the ubiquitous floppy disks," says Black. Using AOL's own sign-up software, AOHell would open accounts with the requisite name, address, phone number, ZIP code, and credit card number-"all of which were fictitious, but were consistent." Black's proposal is to turn this sort of software against the Web sites of spammers-turning the economics of spam on its head. The software would run on a Web site where people could post the Web links embedded in spam they received. Once the link to the spammer's Web site was posted, the counterspam site would generate Web posts to the spammer's site from supposed buyers. "His database would fill up with fictitious names," says Black. To find real customers, he would first have to sort through hundreds of fake ones. This would have a minimal impact on corporate Internet resources. All this activity would take place on a remote Web site, not a company Web site. For less effort than it takes to report an incident of e-mail abuse, such a site could put a huge burden on the systems of spammers. Internet service providers might not appreciate the idea, because it could essentially create a denial-of-service attack when spammers are pointing to their Web servers. This could mean breaking laws designed to protect service providers against digital vandalism and abuse. The idea does cut to the heart of the problem, however. In order to really stop spam, it needs to become economically and technically unfeasible to use it. The only way to do so may be to spam the spammers.

Full Story: <http://www.baselinemag.com/article2/0,3959,920545,00.asp>

(6) State Standards - OREGON REGULATORS PRAISE QWEST IMPROVEMENTS (The Oregonian) By Jeffrey Kosseff. March 12, 2003, SALEM, Ore.- The annual ritual of judging Qwest Communications International's customer service was more of a love fest than the usual regulatory sparring match. On Tuesday, Qwest wowed the Oregon Public Utility Commission with statistics on customer service, complaint levels and network quality. The three-member panel had long grown frustrated with poor service and stingy network maintenance under US West Communications, which Qwest acquired in 2000. But even as they

praised Qwest, regulators remained watchful of the Denver company's shaky financial condition and its reduced investment in Oregon. "It's an extraordinary effort in bad economic times to turn things around," PUC Chairman Roy Hemmingway said of Oregon's largest local-phone service provider. In its meeting to review Qwest's network quality and customer service in 2002, the PUC took the first step in ordering the company to make \$95,000 in network improvements, an amount determined by guidelines in a 1999 state law that deregulated Qwest's profits. The commission could have used the money for network improvements or bill credits. The 2002 penalties are down from \$255,000 for 2001 and \$725,000 for 2000. Much of the \$95,000 in penalties was the result of minor network problems that were fixed quickly. In most categories, Qwest performed well above PUC standards. For example, the PUC would penalize Qwest if more than 154 of its Oregon service orders in the state are delayed in one month. Throughout 2002, it never exceeded that monthly benchmark, and in the past three months it had no such delayed orders. And complaints about Qwest have fallen as well. The PUC said it received 2.99 complaints for every 1,000 Qwest customers in 2002, down 10 percent from 3.33 complaints for every 1,000 customers in 2001. Complaints fell most dramatically in the second half of 2002, and regulators are hopeful that trend will continue. Despite the improvements, Qwest's lower complaint rate remains more than eight times that of Verizon, Oregon's second-largest local-phone carrier, which received 0.36 complaints for every 1,000 customers. Many of the complaints concerned billing and other issues unrelated to network quality.

Full Story: <http://www.oregonian.com>

(7) State Standards - CALIFORNIA PUC REJECTS WIRELESS REQUEST TO SUSPEND A RULEMAKING PROCEEDING TO REVISE THE STATES SERVICE QUALITY STANDARDS. The request was based on the possible impact of the CPUC's pending consumer bill of rights proceeding, which the carriers claim could alter the scope of the service quality standards in the generic standards proceeding.

(8) VIRGINIA DEPARTMENT OF MOTOR VEHICLES FUNDED SURVEY BY VIRGINIA COMMONWEALTH UNIVERSITY FINDS MOBILE PHONE USE SIXTH ON A LIST OF CAUSES OF DISTRACTION-RELATED TRAFFIC ACCIDENTS AFFECTING 5% OF 2,700 ACCIDENTS SURVEYED BETWEEN JUNE AND NOVEMBER 2001. At the top of the list, accounting for 16% of crashes, is "rubbernecking" in which drivers were looking at other crashes or traffic problems. [Not sure how you can do a survey like this scientifically could probably align cell phone bills/times with crash times but beyond that - you have to rely on the "honesty"/memory of someone involved in an accident (who's not likely to tell a cop (or anyone else) the "whole" truth.)

(9) Wireless - Etiquette - CUTTING EDGE: GRAHAM PULLIN AND CRISPIN JONES, IDEO - By Jason Ankeny, Mar 2003- Wireless Review Crispin Jones and Graham Pullin feel your anger. They, too, have had their peace disturbed by loud and aggressive mobile phone users. So they're fighting back.

Full Story: <http://www.mailcubed.com/click.asp?x=593b.1327.1588160>

F. UNIVERSAL SERVICE

(1) Digital Divide - MAKING STRIDES IN DIGITAL DIVIDE (eMarketer) According to a recent study by Arbitron and Edison Media Research, 74 percent of blacks and 65 percent of Hispanics have access to the Internet from at least one location. The report hails the efforts of public schools and libraries for helping to bridge this gap. However, the study also notes that the gap between those who have access in the home versus having access in other locations is still far wider for blacks and Hispanics than it is for their white counterparts.

Full Story: <http://www.emarketer.com/news/article.php?I002101>

(2) Disabled Access - TECHNOLOGY ERODING THE WALL BETWEEN DISABLED, NON-DISABLED (USA Today, Associated Press) As the aged population grows, tech companies face dual incentives to create assistive technologies. Though much of the impetus is regulatory, profit is also a motive -- 42 percent of people 65 and older have a disability, and that population will grow from 35 million to 59 million over the next 20 years. Technologies such as video relay to facilitate telephone use for the deaf are becoming more prevalent as a result.

Full Story: [http://www.usatoday.com/tech/news/techinnovations/2003-03-12-tech-help\\_x.htm](http://www.usatoday.com/tech/news/techinnovations/2003-03-12-tech-help_x.htm)

(3) Federal Fund -Contribution Waivers - 03/12/03 SPRINT SPOKE WITH PAUL GARNETT OF THE WIRELINE COMPETITION BUREAU REGARDING THE PETITION FOR INTERIM WAIVER FILED BY BELLSOUTH, SBC AND VERIZON -CONFIRMING SUPPORT OF AVERAGING USF CHARGES ACROSS A BROAD BASE OF CUSTOMERS and explained how application of USF charges for LNP, PICC and IntraLATA toll would be costly and time consuming to implement at a single customer level. Sprint also stated that application of USF charges on DSL Internet access providers would create a competitive disadvantage vs. cable modem providers, either in terms of higher prices or reduced margins, depending upon whether the DSL provider opted to pass the charge along to the customer or absorb it. CC Docket Nos. 96-45,98-171,90-571,92-237, 99-200,95-116

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