

DECLARATION OF ERIC BRUNO

WC Docket No. 05-25

EXHIBIT 30

REDACTED - FOR PUBLIC INSPECTION

SIEMENS

1-800-310-6308

Corporate Overview

Siemens Enterprise Networks, USA

Siemens Enterprise Networks, a division of Siemens Communications, Inc., is the leader in converged communications solutions. With over 1 million customers globally, Siemens Enterprise Networks delivers an affordable migration strategy to evolve your business-to-IP.

Influence and Reach

4,100 Information and Communications Networks employees in U.S.

37,600 Information and Communications Networks employees globally - 160 countries

President

Joseph Licata, President Siemens Enterprise Networks in U.S.

History of Siemens Enterprise Networks in U.S. market

In 1973 Siemens opened its first factory producing telephone equipment in New Jersey. In 1988 Siemens acquired Stromberg Carlson, a manufacturer of switching technology equipment. In 1990 Siemens entered into a joint-venture with ROLM, a manufacturer of communications systems. In 1992 ROLM was fully acquired by Siemens.

Milestones

- The 10 millionth optiset E telephone was installed by the Enterprise Networks division of Siemens AG in Brazil, June 2001
- Over one million IP-enabled Hicom PBXs worldwide
- Over 6 500 native IP installations worldwide

HiPath Strategy

March 2000: **HiPath Strategy** Announced. It offers a means of delivering a world-class Enterprise convergence architecture that provides customers with Choices, Evolution and Value during the "transition years."

May 2000: Introduction of 21 new products and services with a focus on creating an enabling infrastructure and establishing interworking between circuit- and packet-switched solutions. Focus is on IP- and TDM-based as well as IP-enabled communication platforms, workpoints such as IP telephones and multimedia PC clients, and access points, including gateways, shelves, and terminal adapters.

March 2001: Introduction of 25 new convergence products, with a focus on applications, workpoints, and multi-site connectivity. Focus on IP-based applications and solutions such as HiPath ProCenter for electronic Customer Relationship Management (eCRM) and HiPath MobileOffice a comprehensive set of solutions for mobile applications and Mobile Business.

February 2002: Dozens of new HiPath offerings are announced. Entire HiPath portfolio is now IP-centric.

September 2002: Announcement of HiPath ComResponse and CorporateConnect, as well as a www.SiemensMobility.com interactive demo.

Statement of Direction

 **Profitability with Communication Over IP? Statements of Direction**, 308.3 KB

Our customers reap the rewards of our innovative power. We invest more than 1.2 billion euros in research and development every year and hold more than 17,000 patents.

Siemens, March 2002

Firsts

- Winter 2002: Industry's first large all-IP "from the ground up" facility - Siemens Silicon Valley campus "**Skypoint**."
- April 2001: Industry's first multiprotocol telephone, the **optiPoint 400**.
- January 2001: Industry's first SIP (Session Initiation Protocol) telephone, the **optiPoint 100**.

R&D Patents

- Siemens spent \$5.4 billion worldwide on R&D in FY2002, 41 percent of which was in telecommunications
- Siemens Corporation (U.S. alone) has 7,400 employees working on R&D and dedicates nearly \$900 million annually to R&D
- Of telecommunications R&D, 80 percent is in IP convergence
- Globally, Siemens holds 7,700 U.S. Patents
- Siemens employees filed 4,566 patent applications in FY2002 making Siemens the largest patent applicant at the German Patent and Trademark Office and placing it among the top ten patent holders at the U.S. Patent and Trademark Office

Customers

- EN has over 1 million customers globally or 70% of Fortune 500 and Euro Stoxx 50 companies
- EN has over 400,000 service contracts globally
- Customers include Howard University, Kodak, Dole, AOL, AT&T, BellSouth, Ford, U.S. Army, NASA, Coca Cola, BP Amoco, Bayer, Lufthansa

Community Relations and Environmentalism

- Siemens AG was recognized in January 2002 as one of the world's 20 most respected companies for environmentalism. The list, compiled by the Financial Times annually, is based on comments from chief executives, media commentators and non-government organizations (NGOs).
- Siemens Corporation donated \$2 million to the September 11 Fund and matched all grants from its over 460,000 employees

worldwide. Total contribution over \$10 million.

- Siemens Corporation received America's Charities 2001 Corporate Leadership Award for promoting employee involvement and support for charities.

About Siemens Communications Inc. (U.S.)

- Siemens Enterprise Networks is a division of Siemens Communications, Inc. Other Siemens Corporation, Inc. subsidiaries include **Siemens Carrier Networks, Subscriber Networks, Trango Software.**
- FY2002 sales were \$1.6 billion (fiscal year ending Sept. 30, 2002)
- Employs approximately 4,10

About Siemens Communications (global)

Siemens Communications is one of Siemens AG's 3 telecommunications groups. (Siemens Information and Communication Mobile and Siemens Business Services are the others.)

Siemens Communications, Inc. FY 2002 sales globally: \$8.9 billion
Siemens Communications, Inc. Employees globally: 37,600
Presence in 160 countries

About Siemens Corporation (i.e. Siemens in U.S.)

Siemens Corporation, founded 1970, is the holding company for more than 30 Siemens operating companies in the United States in many sectors including telecommunications, medical, energy and automation, transportation, and lighting.

FY 2002 sales: \$21.5 billion (24% of Siemens worldwide sales).

Fortune 500 rank: #24

Employees in U.S.: 70,000

Recent Acquisitions: Since 1998 Siemens Corporation has spent some \$8 billion for acquisitions including: Westinghouse Power Generation - \$1.5 billion; Shared Medical Systems - \$2.1 billion; Acuson - \$700 million; Moore Products / Milltronics - \$400 million.

U.S. Market Facts:

- The U.S. Postal Service relies on more than 13,000 automation systems from Siemens.
- Siemens in the U.S. produces more than 1 million electronic circuit breakers every business day.
- Siemens in the U.S. produces more than 3.3 million energy-saving lamps.
- Power generation systems from Siemens produce nearly 40% of U.S. electricity.
- Siemens supplies one out of four light rail vehicles in the U.S.

About Siemens AG (i.e. Siemens globally)

FY 2002 sales: \$77.8 billion

Employees globally: 426,000

Presence in 193 countries

Listed on NYSE (symbol: SI) since March 2001. Also listed on stock exchanges in London, Paris, Zurich, Vienna, Amsterdam, Frankfurt and regional German stock exchanges.

Siemens traces its origins to 1847.

Annual report FY2001

Public Relations Office

Suzanne Crow, Ph.D.

Director of Siemens Communications, Inc.

Office: (703) 262 2636

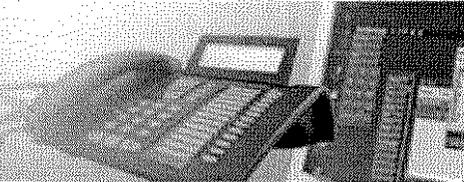
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Products, Solutions, & Services



Whether it's through a cell phone, pager or e-mail, there are so many ways for us to get in touch with others today. However, that can lead to sending and receiving the same message over and over on all of your communication devices. In fact, Forrester Research estimates the average American employee spends 26 minutes a day just retrieving messages, many of them duplicates.

Enter HiPath OpenScape, a new software designed to integrate your communication devices. Using a menu much like an instant messaging buddy list, you can find out instantly the best way to reach someone—by cell phone, home phone, hotel phone, even PDA, pager or e-mail. And that can save you time, energy and ultimately money.

View the HiPath OpenScape News Release Video
56K | 150K

Product Categories

- **Communication Platforms**
Host systems that control features, access, configuration and call processing functions.
- **I&C Infrastructure**
Elements in the enterprise network that facilitate transport and routing of multiple media—voice, data, video.
- **Access Point**
An intermediate connection point between a host system and client devices or end points.

More Key Resources

- **Industry**
- **Customer Interaction & eCRM**
- **Unified Communications & Mobility**
- **About HiPath**
- **About HiPath OpenScape**
- **Success Stories**
- **White Papers**

Anti-Virus Statement

Position Statement on Anti-Virus Software, Microsoft Compatibility and Siemens-Developed Product Support

Security Statement

Position Statement on General Security of Products

client devices or end points.

- **Phones & Softclients**
End user devices and clients (phones, soft clients, etc.).
- **Applications**
Software used with HiPath systems to support enhanced business functionality such as contact centers, messaging, and mobility.
- **Management**
Used for performing administrative and service support functions on all systems and applications in the network.
- **Availability**
Ensures quality, security, and reliability of enterprise networks.
- **Services**
HiPath Services provide a comprehensive portfolio of end-to-end services—Professional, Lifecycle and Managed.
- **Mobile Business**
Complete mobile e-business support, allowing you to conduct business with Siemens at your leisure.

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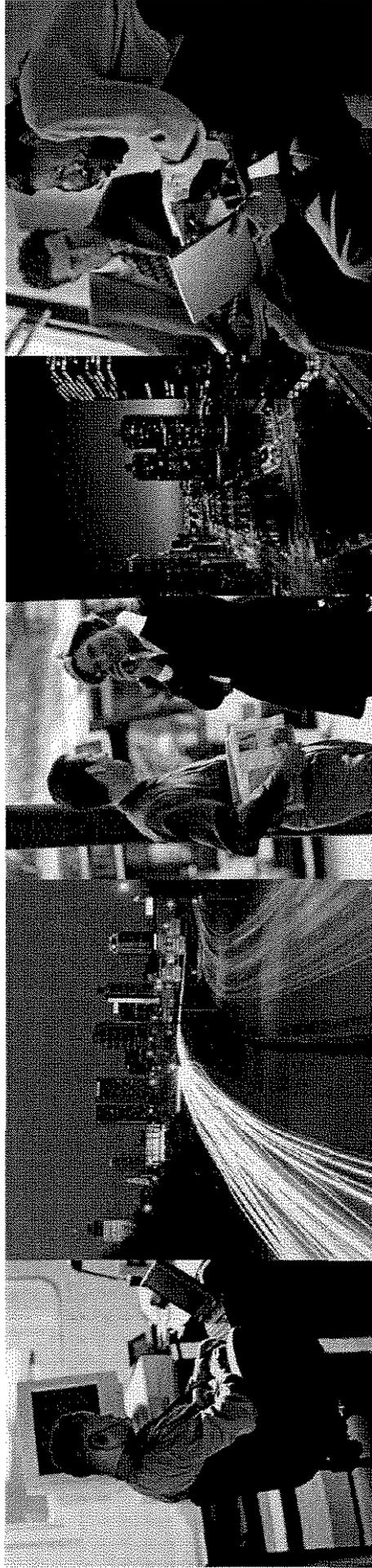
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Cindy Christy
President, Mobility Solutions Group

Live wireless. Work wireless. Be wireless.

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Forward Looking Statement Disclosure

This presentation includes some forward-looking statements about our expectations for our future performance. Actual results could differ materially from those suggested by my comments today. Additional information about factors that could affect future results are addressed in our SEC filings, including our Form 10-K, 10-Q, and 8-Ks.

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Mobility Overview

- **Q204 Highlights:**
 - Revenues of \$951M
 - Sequential gains in segment income for each of the last three quarters, to \$378M in Q204, up \$206M Q/Q
 - Selected by Verizon Wireless as a key supplier for its BroadbandAccess high-speed mobile data network
- **Increased share in the global CDMA market to 41.4% in 2003** (source: Dell'Oro)
- **Gaining momentum in UMTS/W-CDMA**

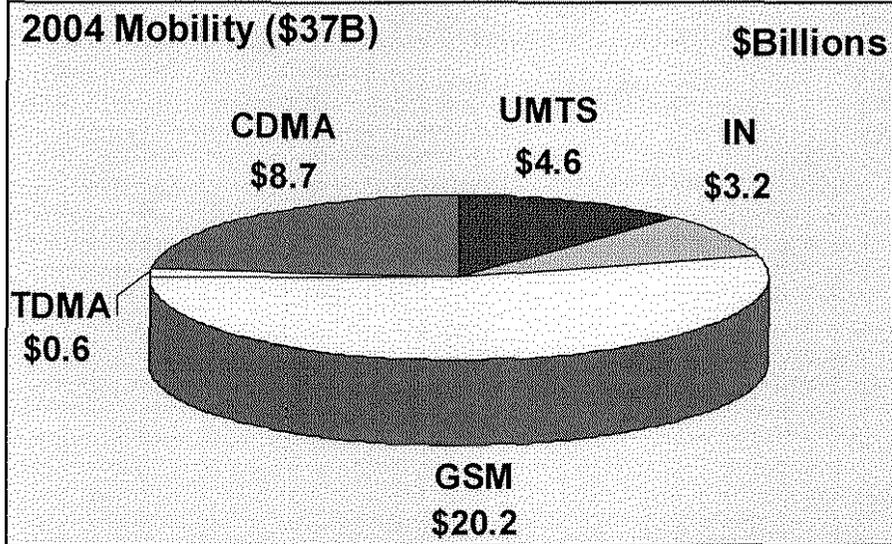
Base Stations	Radio	3G Mobile Switching	Software and Applications	Data Networking Portfolio
<ul style="list-style-type: none"> ✓ Flexent™ OneBTS™ Modcell 4.0 ✓ Flexent® Modular Cell 4.0 Compact ✓ Supports CDMA2000 and UMTS/WCDMA 	<ul style="list-style-type: none"> ✓ Radio Network Controller provides high-performance radio access control function for CDMA2000 and UMTS/WCDMA 	<ul style="list-style-type: none"> ✓ Softswitch MSC enables innovative new services for mobile Internet and voice-over-packet 	<ul style="list-style-type: none"> ✓ Super Distributed HLR authenticate, manages profiles and Internet addresses ✓ MiLife™ Portfolio 	<ul style="list-style-type: none"> ✓ Data Networking minimizes data transport leasing costs and simplifies/consolidates network operations



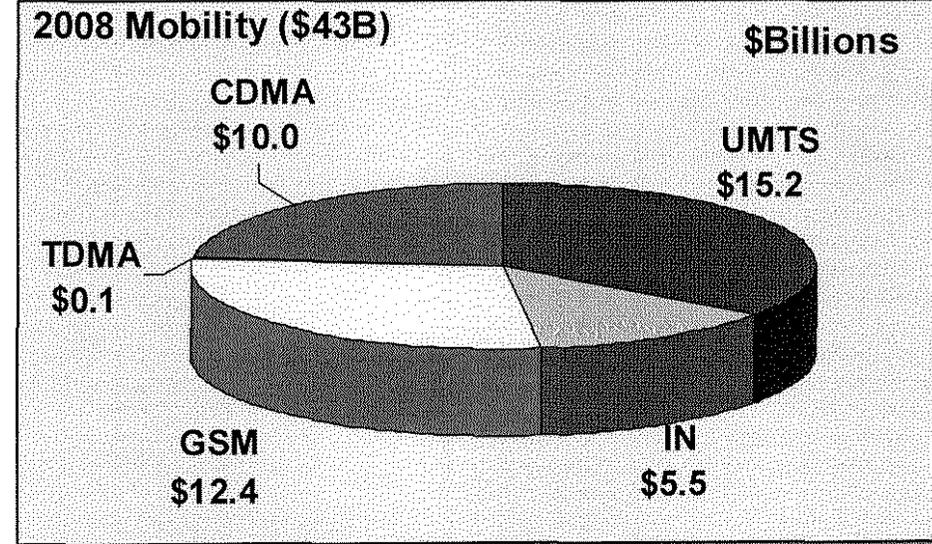
Mobility Market

- 3G spread-spectrum continued growth worldwide
- Decline in GSM, UMTS delay in Europe
- IN as enabler of new services
- Lucent's advantage: Intense focus on 3G spread-spectrum
 - CDMA2000 and WCDMA (UMTS)

Spread spectrum technology made up
44% of TAM in 2004...



...and grows at a rapid pace to 71% of
the mobility spend by 2008



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Recent Wireless Wins

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- ✓ **U.S. Cellular**
 - \$150M contract including CDMA2000 1X channel cards and software and Flexent® CDMA Modular Cell 4.0 base stations
- ✓ **Verizon Wireless**
 - \$525M contract for Nationwide CDMA2000 1xEV-DO roll out
- ✓ **Telecom Italia Mobile, T-Mobile, Orange, E-Plus, Telefonica Moviles, O2, “3”**
 - Multi-million dollar contracts for UMTS (W-CDMA) Wireless PC Modem cards
- ✓ **Delta Telecom (SKYLINK), Uzbek Telecom**
 - CDMA450 equipment and services
- ✓ **Telefonica Moviles (Spain)**
 - Network management software for UMTS (W-CDMA), GPRS and GSM networks
- ✓ **SprintPCS**
 - New \$1B new contract including Flexent® CDMA Modular Cell 4.0 base stations
- ✓ **KTF (Korea)**
 - \$80M contract to supply 3G CDMA2000 1xEV-DO network
- ✓ **AT&T Wireless**
 - W-CDMA (UMTS) equipment trial in Miami
- ✓ **China Unicom**
 - \$400M contract win in Phase III CDMA2000 rollout
- ✓ **VIVO**
 - Agreement to expand VIVO's 3G CDMA2000 1X network

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Market Dynamics

Technology:

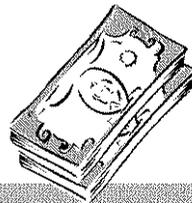
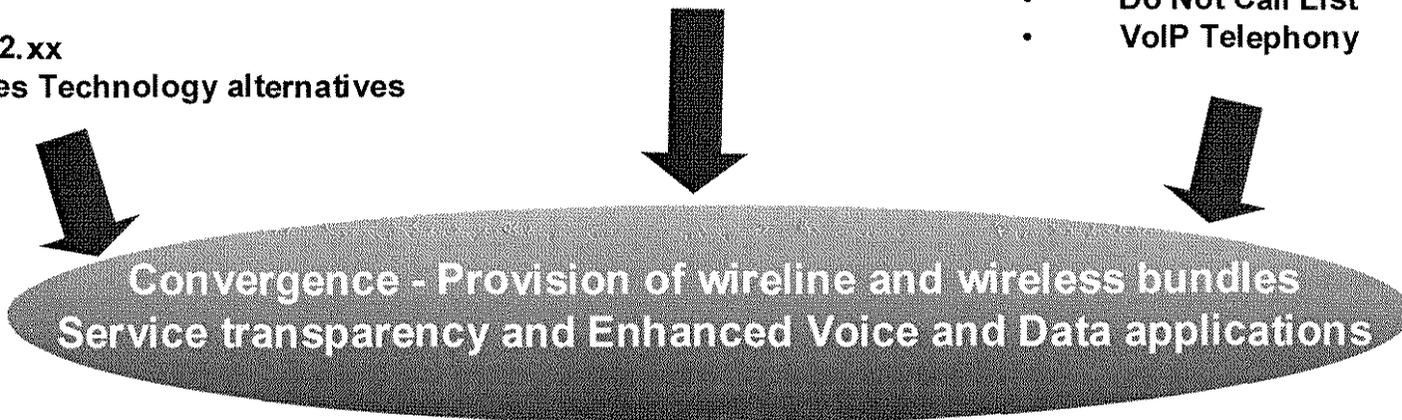
- CDMA2000® & UMTS (W-CDMA) Advances
- Softswitch Technology
- VoIP
- WiFi/802.xx
- Premises Technology alternatives

Competitive Forces

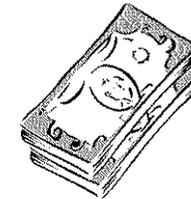
**New Players
“Bundling”**

Regulatory Changes:

- Local Number Portability (LNP)
- Do Not Call List
- VoIP Telephony



Convergence Creates New Opportunities



- For End-User(s):**
- New services bundles and devices
 - Access a wider array of services
 - Greater productivity and easy of use
 - Consolidate to single bill
 - Better customer care
 - Greater ease of use
 - Device/access alternatives

- For Operators:**
- Enhance differentiation by creating Sticky services and offers
 - Increase market share and ARPU
 - Reduce churn

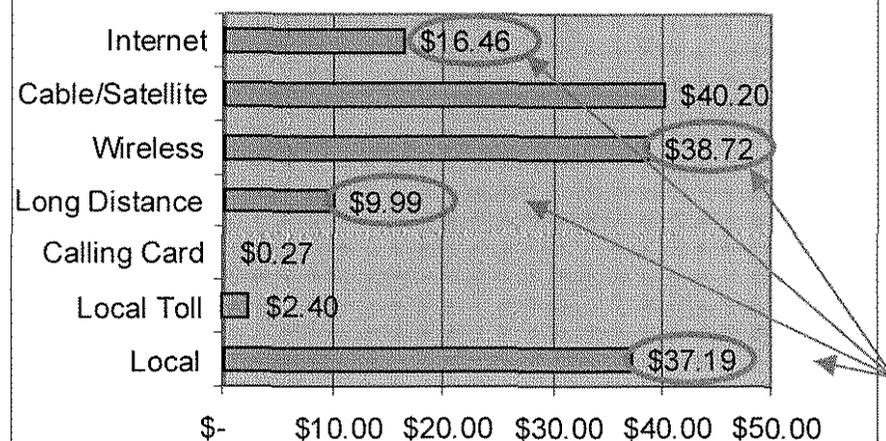
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Residential Telecom Wallet

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Average Monthly Telecom Expenses (US)
“The residential telecom Wallet”



Total current spending: \$145
(broadband not even reflected)

TNS Telecoms Industry Tracking Data

- **Market Trends**
 - Everyone is bundling to retain subscribers (reduce churn)
 - Pieces of the “wallet” are beginning to disappear (e.g. calling card, LD for wireless calls)
- **Market opportunity**
 - End-Users are driven by the opportunity to reduce monthly spend
 - Opportunity for operators to take share and grow ARPU
- **Observations**
 - Players with scale have an advantage
 - **Bundling alone will shrink the wallet**

Opportunities exist for converged networks to serve the needs of today’s wireless and wireline subscribers

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Start with the End-User....

Benefits of the Future Network

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- Lifestyle Services & Personalization
 - “We Bring the Network to You !!”
 - Customization to Meet Consumer Needs
- Ease of use – Seamless, “Always-On”
- Inside & Outside Premises
- Enhanced service and offer bundling
 - Voice, data, video/entertainment, mobility
- Access independence
 - Any location, any time, variety of access & devices
- Device alternatives
 - Mobile phone, laptop, PDA, etc.
- One stop billing and customer care

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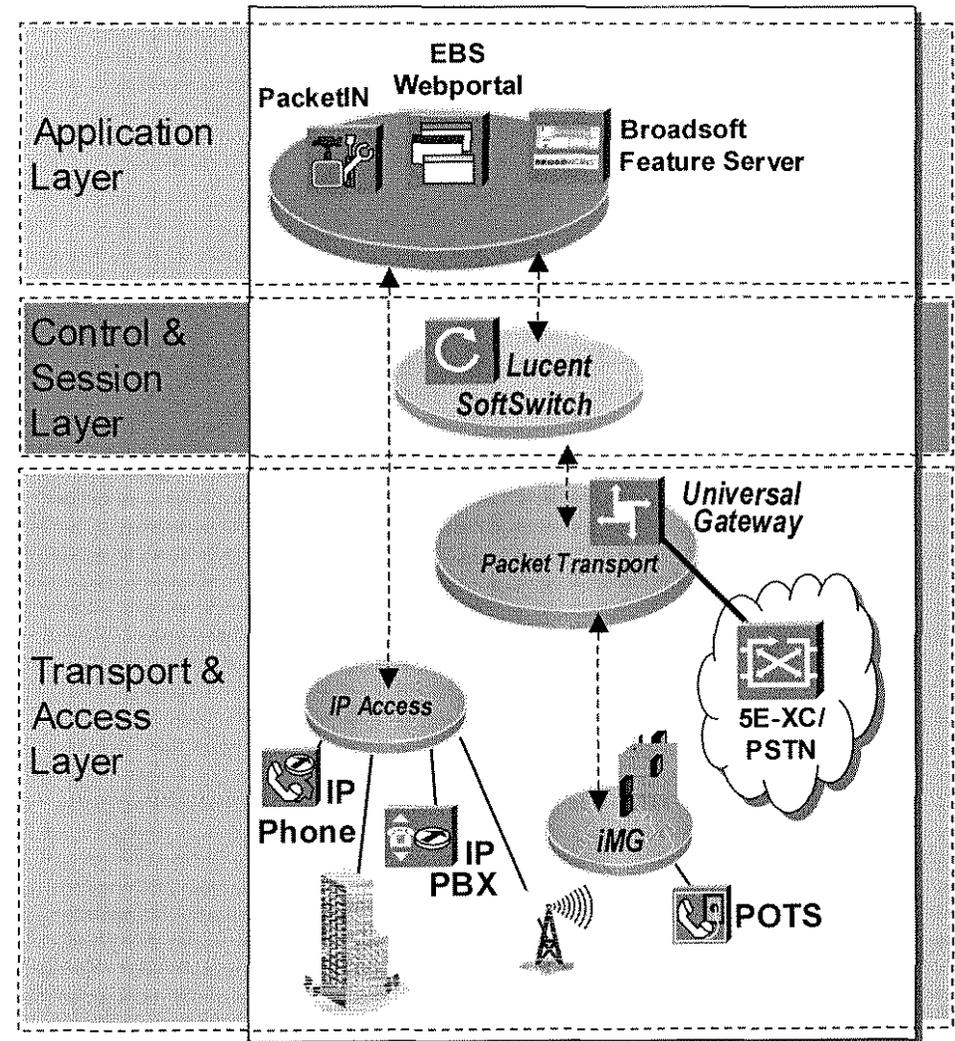
Realizing the Benefits of 3G Voice and Data Convergence

Market-Focused IP Solutions

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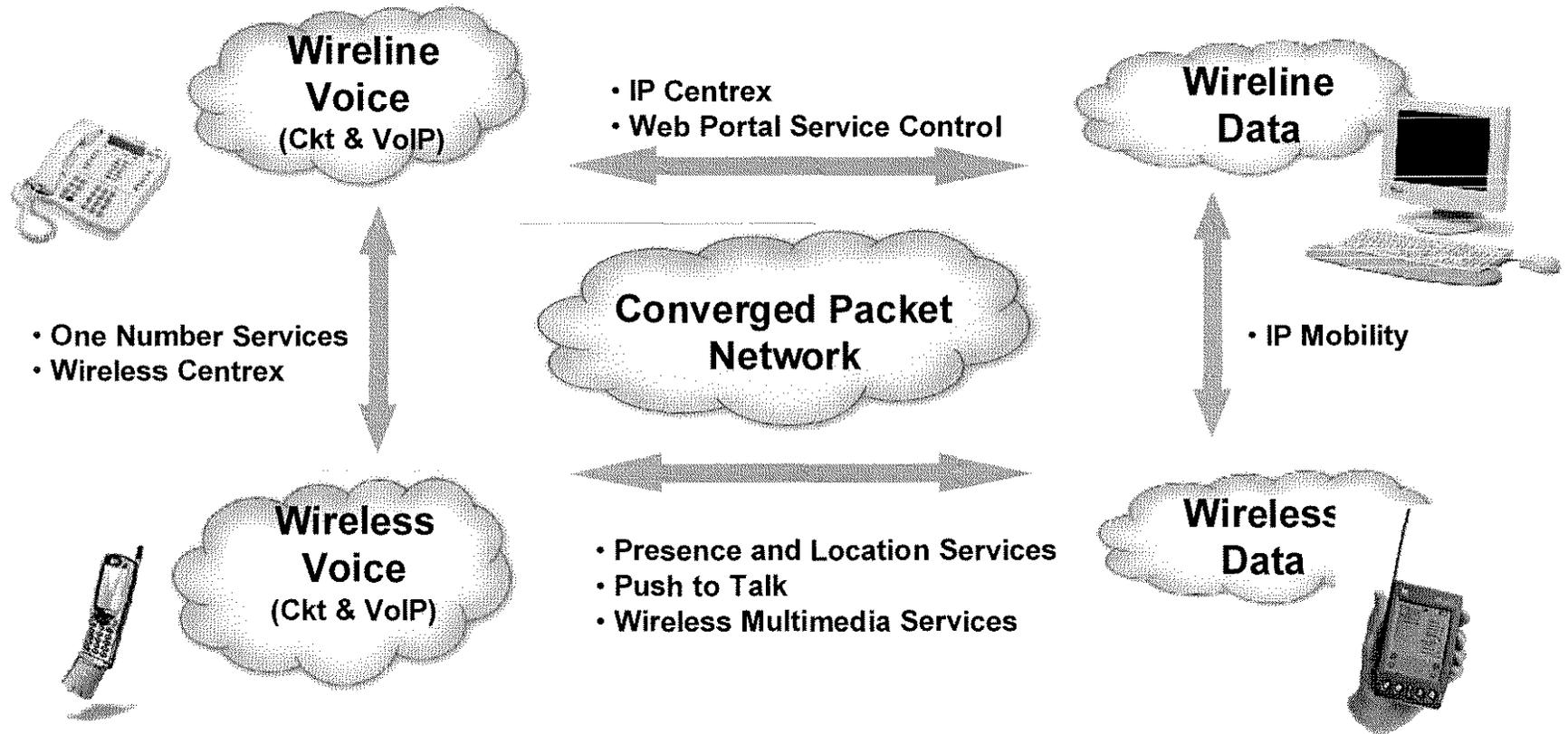
- IP Telephony Is Changing the Market
 - Moving from hardware to software driven
 - Access Independence - IMS
 - Applications driving all segments
 - ✓ Personal Organizers & Unified Messaging
 - ✓ Presence & Push to Talk
 - ✓ Push to Media
 - ✓ Gaming &
 - ✓ VoIP
- Market Focused
 - Wireless – UMTS; CDMA-2000
 - Business – Hosted and Managed
 - Consumer – VoBB
 - Wireline



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The First Step.... Network Convergence



**Convergence enables new Access Independent services
Bringing the Network's Intelligence to the End-User**

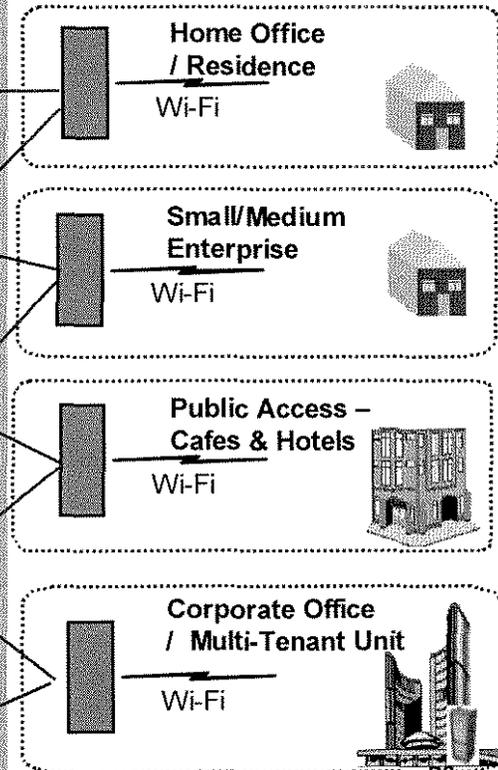
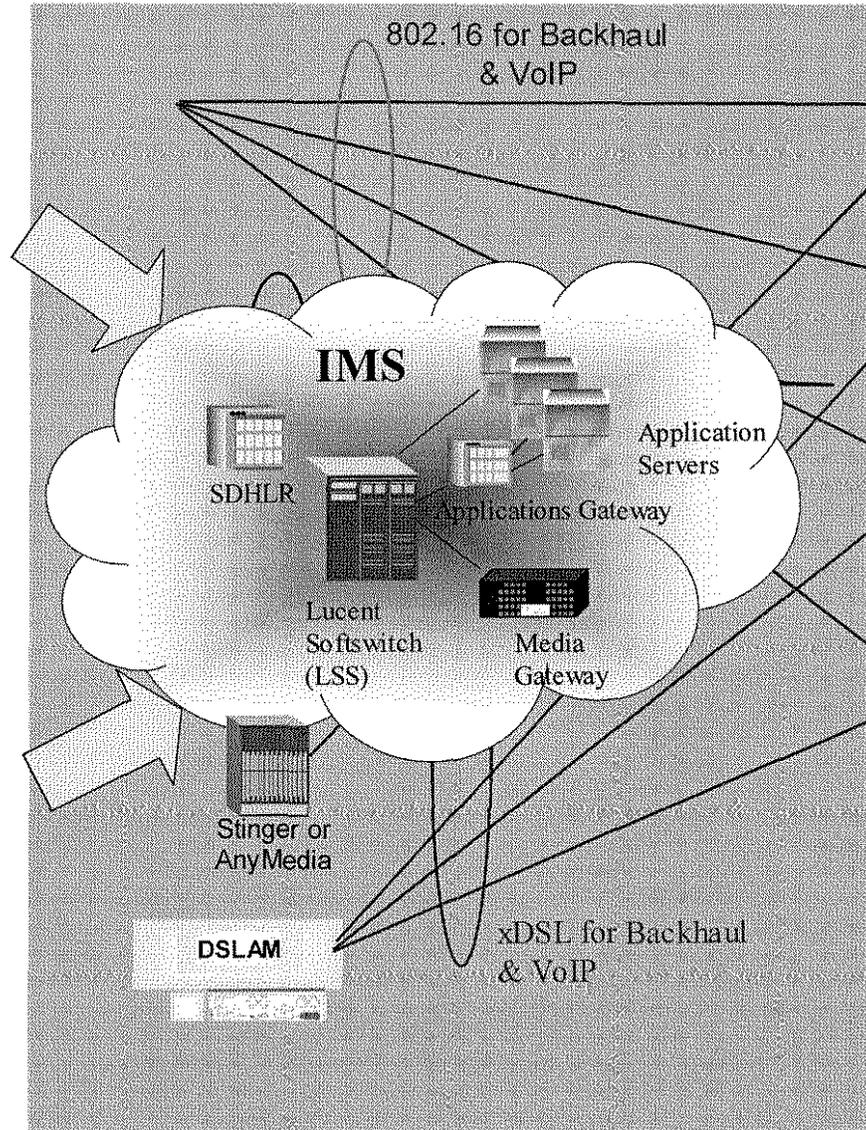
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IP Multi-Media Subsystem (IMS) Packet Core

(Mobile) Core Network & Network Elements
MSC
SD-HLR, HLR, AAA
Mobile IP G/W (PDSN/GGSN – e.g. Cisco)
Softswitch & Media Gateway
Media Replicator & PTT Server
Network Management
(Fixed) Core Network & Network Elements
Softswitch & Media Gateway
Media Replicator & PTT server
Network management
AAA
Mobile IP Gateway
Router (e.g. Juniper)

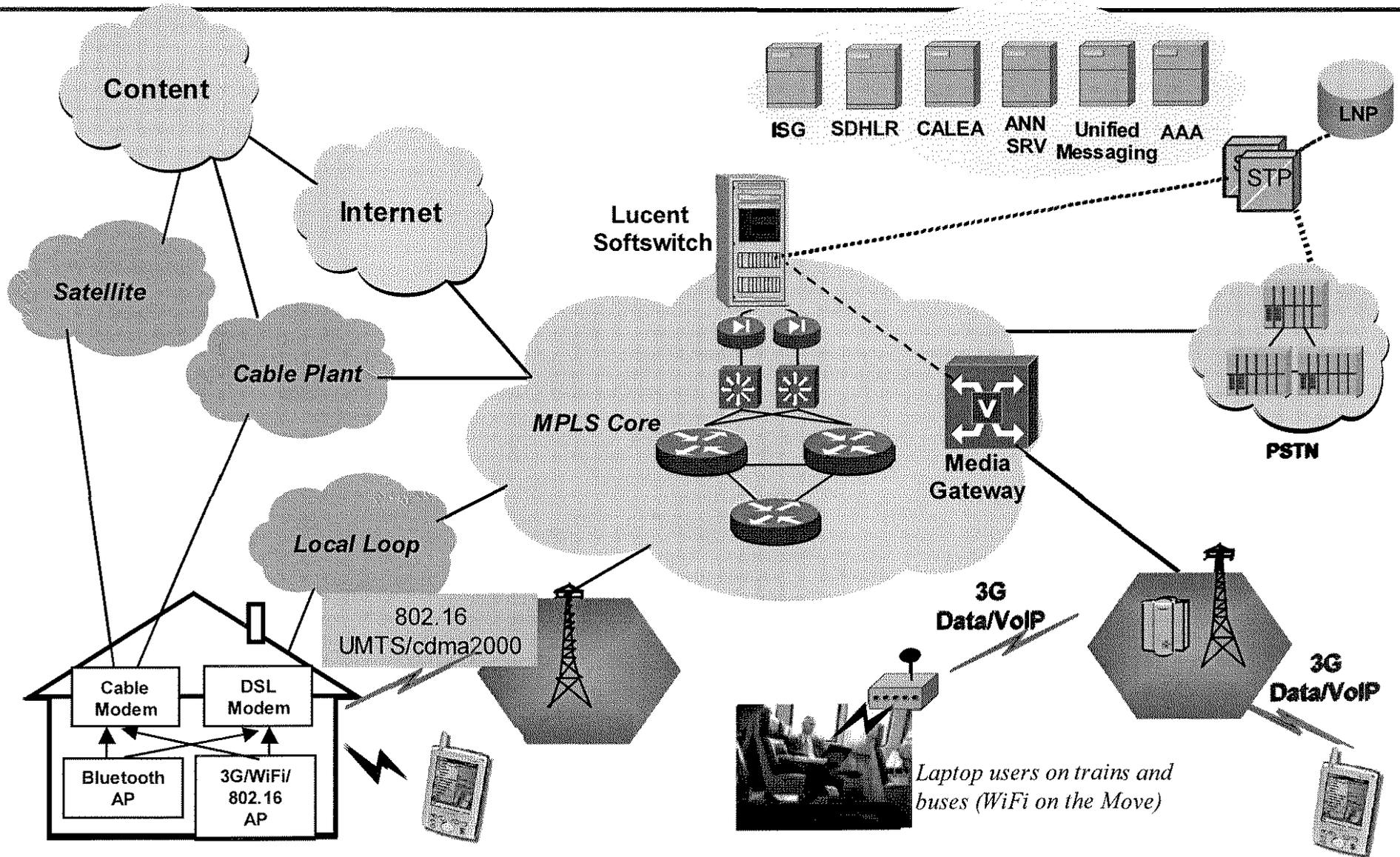


- **Wi-Fi Access with Wireless Broadband Backhaul**
- **WiFi access with 3G backhaul – (4 to 8 Mbps)**
- **Leverage Wi-Fi technology**
- **Handset/Device:**
 - Dual-Mode – Wi-Fi
 - Single Mode Wi-Fi

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Reaching the End-User Make the Experience Seamless !!

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End-User's 24 Hour Day.... Seamless Experience

Services Customized to Location, Presence and End-User Need

High-Speed Data Mobile Professional

Mass Market – Personal Uses

Capture End-User Services Needs

24 Hour Experience

- Clear and simple needs
 - ✓ Access to Enterprise LAN
 - ✓ High access speeds
 - ✓ Laptop and PDA access
- Data centric
- Willing to pay premium for mobility

- Complex and variable needs
 - ✓ Lifestyle enhancements
 - ✓ High ease of use
 - ✓ Different modes of access
- Voice centric
- Need Data – Lifestyle Services
- Largest number of subscribers

Seamless Easy-to-Use Movement
It's All About the Communications Experience !!
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Lucent Delivers the Vision

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3G

CDMA2000	UMTS W-CDMA
EV-DO	HSDPA
Revision A EV-DO Revision D EV-DV	HSDPA-EUDCH
SoftSwitch/MG	SoftSwitch/MG
VoIP/QoS/MPLS	VoIP/QoS/MPLS
802.11/16 Interop.	802.11/16 Interop.
BLAST/MIMO	BLAST/MIMO
Base Station Routers	Base Station Routers

4G



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Key Takeaways

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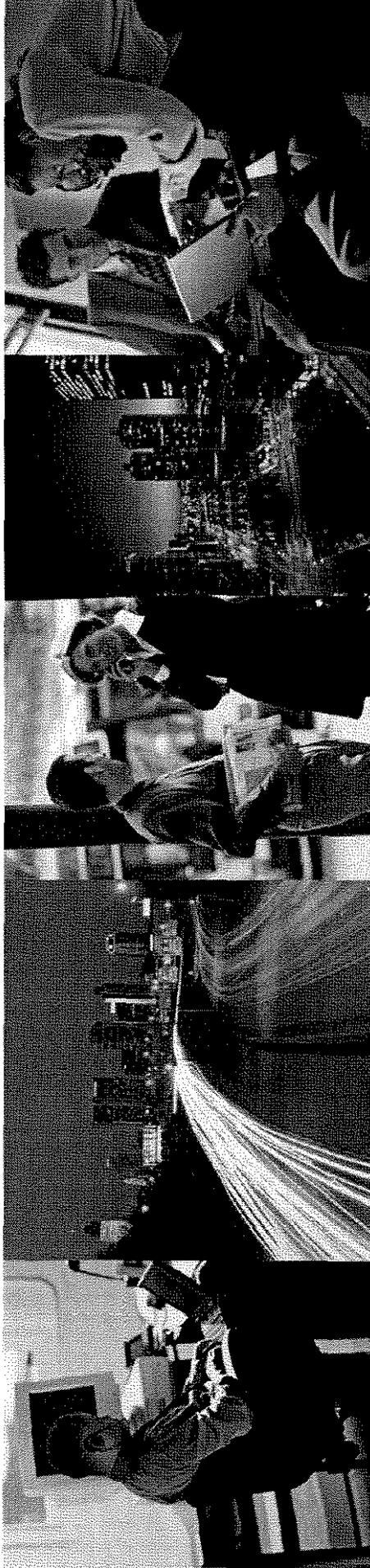


- “Bring the Network to the User” - Mass Market 3G HSD
 - Enterprise, Consumer – Voice, Data, Video/Image
 - Personalization & Customization – “Always-On”
 - Seamless Mobility & Presence – Inside & Outside Premises
- Convergence & IMS
 - 3G HSD Lays the Foundation
 - Mass Market Converged Services – Data & VoIP
 - Access Independence
- IMS Architecture key to new services
 - Location Based Services, Push to Speak, Push to Video,.....
 - Circuit to Packet Platform migration to All-IP VoIP Networks
- Converged Lifestyle Services
 - Manage Professional & Personal Applications

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Q&A

Cindy Christy
President, Mobility Solutions Group

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IP Centrex Services for Enterprises



IP Centrex is a service that enables enterprises to merge **voice telephony** and **Internet technology** on a **single, simpler, cost-effective network**.

Carrier networks built with Lucent's IP Centrex equipment provide unified communications that connect remote workers and locations, to help increase productivity and improve customer service while lowering enterprise costs for voice and data communications.

Unify voice and data on one network



IP Centrex is a secure and reliable solution that lets enterprises unify voice and data communications on a single network. It is a fully managed service that combines the functionality of Centrex with the benefits of voice over Internet protocol (VoIP). IP Centrex enables enterprises to unify multiple locations and deliver seamless support for local and remote workers, who benefit from the appearance of actually being in one office. Because IP Centrex is monitored and maintained on a carrier's network, it is a simpler and more cost-effective way to deliver the flexibility and features that enterprises want, and the network reliability they need.

IP Centrex leverages systems enterprises currently have in place to reduce costs associated with buying, maintaining and upgrading telecommunications equipment, protect against equipment obsolescence, and reduce the time and expense of moving or adding phone services for a

Related News and Events

Lucent and Imtech selected by Multikabel Netherlands to provide VoIP infrastructure [More](#)

Lucent's enhanced media server wins Internet Telephony's 2002 Product of the Year award [More](#)

Lucent's new 5E-XC™ high-capacity switch selected by SBC [More](#)

Lucent's new high-capacity switch accelerates cost-effective migration to Internet Protocol networks [More](#)

Lucent to supply three new customers with enhanced media server for packet, voice and data services [More](#)

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Document library**How to buy**
**Accelerate™
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changing workforce. It unifies communications that connect remote workers and locations, adding robust remote worker capabilities that help enterprises increase worker productivity and improve customer service.

Enhanced Business Services (EBS) provides access to a suite of fully hosted Computer-Telephony Integration (CTI) applications enabling new options for enterprise-wide communications unity and effectiveness. EBS enables CTI features such as:

- Click to dial, add and transfer - the ability to click on phone numbers in the Web portal GUI to initiate calls.
- Call logs - call history information, such as calling/called party, date, time, duration, etc., presented in the Web portal
- Progressive conferencing - the ability to build a multi-party conference bridge through the portal GUI.
- Find me/follow me - the ability to create profiles to customize inbound call treatments.
- Web-based control of calling features - the ability to program buttons within the portal to invoke calling features with a mouse click.
- AnyDial - the ability to dial any web phone number with a mouse click.
- Directory search - the ability to access the corporate Lightweight Directory Access Protocol (LDAP) directory for click to dial and click to e-mail.
- Unified Messaging - a unified view within the portal to all messages, call logs, e-mail and voicemail.
- Speed dial - the ability to quickly build "clickable" lists of frequently dialed numbers.
- Personal address book - a repository of a user's own personal EBS contacts.

Leverage existing investments

IP Centrex Services let enterprises leverage their investment in PBXs, key systems and Centrex. Voice and data networks are consolidated on Local Area Networks (LAN) and Wide Area Networks (WAN), saving on wiring and maintenance costs. Capital expenditures for premises equipment are virtually eliminated, along with the risk of premature technology obsolescence. The carrier manages the edge technology and transport layers, resulting in lower overhead cost for the enterprise.



With the addition of portal-based EBS, IP Centrex users can more readily operate existing features while saving on redundant calendaring, instant messaging services costs, Unified Messaging, conferencing, and client

**IP Centrex Trial Program
for Enterprises**
Related Materials

IP Centrex Services for Enterprises brochure [More](#)

Enhanced Business Services for Enterprises brochure [More](#)

software licenses. This capability reduces the need for IT help desk support, simplifies vendor management, and helps improve customer service.

Improve remote worker capabilities



IP Centrex Services enable enterprise work forces to be distributed where it makes the most sense for business needs. Remote workers can access the full in-office communications toolset from virtually anywhere. An enterprise's mobile workforce can use four- or five-number dialing with most-wanted services, such as transfer, conferencing, caller ID and call forwarding. Enterprises can easily create and manage virtual call centers on demand, easily distributing traffic among multiple, geographically disparate facilities, including at-home workers.

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Lucent Technologies Completes Acquisition of Telica, A Provider of Next-Generation VoIP Systems for Service Providers

FOR RELEASE MONDAY AUGUST 23, 2004

MURRAY HILL, N.J. - Lucent Technologies (NYSE: LU) today announced it completed its acquisition of Telica, a provider of voice over Internet protocol (VoIP) communications systems for next-generation networks.

On May 24, 2004, Lucent had announced its agreement to exchange 92.7 million shares of common stock and options for all of Telica's equity.

"Telica significantly strengthens Lucent's Accelerate™ portfolio for VoIP networks that deliver multimedia voice, video and data services to enterprises and consumers," said Janet Davidson, president of Lucent Technologies' Integrated Network Solutions (INS) business. "Telica provides some key elements of our strategy to become the leader in converged networks, and it significantly enhances our ability to help service providers deliver next-generation multimedia services to their customers."

Lucent Technologies designs and delivers the systems, services and software that drive next-generation communications networks. Backed by Bell Labs research and development, Lucent uses its strengths in mobility, optical, software, data and voice networking technologies, as well as services, to create new revenue-generating opportunities for its customers, while enabling them to quickly deploy and better manage their networks. Lucent's customer base includes communications service providers, governments and enterprises worldwide. For more information on Lucent Technologies, which has headquarters in Murray Hill, N.J., USA, visit www.lucent.com.

This news release contains forward-looking statements that are based on current expectations, estimates, forecasts and projections about us, our future performance, the industries in which we operate, our beliefs and our management's assumptions. In addition, other written or oral statements that constitute forward-looking statements may be made by or on behalf of us. Words such as "expects," "anticipates," "targets," "goals," "projects," "intends," "plans," "believes," "seeks," "estimates," variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and

Related Links:

Lucent strengthens Voice over IP portfolio

assumptions that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements. These risks and uncertainties include: fluctuations in the telecommunications market; our ability to compete effectively; our product portfolio and ability to keep pace with technological advances in our industry; our reliance on a limited number of key customers; our exposure to the credit risk of our customers; the pricing, cost and other risks inherent in our long-term sales agreements; the costs and risks associated with our pension and postretirement benefit obligations; the social, political and economic risks of our foreign operations; our reliance on third parties to manufacture most of our products; our ability to generate positive cash flow; existing and future litigation; our ability to protect our intellectual property rights and the expenses we may incur in defending such rights; the complexity of our products; changes to existing regulations or technical standards; changes in environmental health and safety laws; the potential impact on us in connection with negotiating new collective bargaining agreements; and our ability to retain and recruit key personnel. For a further list and description of such risks and uncertainties, see the reports filed by us with the Securities and Exchange Commission. Except as required under the federal securities laws and the rules and regulations of the SEC, we do not have any intention or obligation to update publicly any forward-looking statements after the distribution of this news release, whether as a result of new information, future events, changes in assumptions, or otherwise.

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DECLARATION OF ERIC BRUNO

WC Docket No. 05-25

EXHIBIT 32

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Select an Area

- ABOUT CISCO
- ▼ INVESTOR RELATIONS
 - Company Overview
 - Stock Information
 - Corporate Governance
 - Annual Reports
 - Financials
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 - E-Mail Alerts

SEC FILINGS

- + 10-K
- + CISCO SYSTEMS INC filed this 10-K on 20 SEP 2004

+ **Table of Contents**

What's New

Cisco's Q3 FY05 Financial Results:
Cisco reported Q3 FY05 Financial Results on Tuesday, May 10, 2005, after the close of market.

Please click below for supporting materials:
[Press Release](#)
[Webcast with Slides](#)
[Slides Only \(PDF\)](#)
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**UNITED STATES
SECURITIES AND EXCHANGE COMM
WASHINGTON, D.C. 20549**

FORM 10-K

(Mark one)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF ' EXCHANGE ACT OF 1934

For the fiscal year ended July 31, 2004

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 0-18225

CISCO SYSTEMS, INC.

(Exact name of Registrant as specified in its charter)

California
(State or other jurisdiction of incorporation or organization)

77-0059
(IRS Emj Identificati

170 West Tasman Drive
San Jose, California
(Address of principal executive offices)

95134-
(Zip Co

Registrant's telephone number, including area code: (408) 526-4

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Storage Area Networking

We provide storage networking products that deliver standards-based connectivity between servers and storage systems, which can include products such as arrays and tape drives. Our products incorporate intelligent network features, such as advanced security, traffic management, virtualization, and tools that are designed to help make storing, retrieving, and protecting critical data across widely distributed environments more efficient.

Wireless Technology

We offer a broad variety of in-building wireless LAN and outdoor wireless bridging products. These products include access points, an integrated wireless and wireline switching system, wireless LAN client adapters, bridges, antennas, and accessories. Our wireless networking products are designed to provide high-performance, highly secure, manageable, and highly reliable wireless LANs that enable mobility and increase productivity.

Other Products

Our other products comprise primarily of access and network management software products as follows:

Access

Our access products give remotely located groups and individuals similar levels of connectivity and information access to achieve seamless connections for users whether they are located at a company's head office, at home, or traveling. Asynchronous and Integrated Services Digital Network (ISDN) remote-access routers, dialup access servers, wireless solutions, digital subscriber line (DSL) technologies, and cable universal broadband routers provide telecommuters, mobile workers, students, and other users with remote network access.

Network Management Software

Our enterprise and service provider customers depend on our network management products to provide continuous system operation, security, configuration, monitoring, network optimization, and end-user management. Utilizing our embedded instrumentation, interfaces, and application services and a portfolio of carrier-class, large-scale management products, we offer network management solutions across our product lines. We aim to bring state-of-the-art management capabilities to a converged network management solution covering all our network technologies and services with a high level of inherent security, network intelligence, and high availability. Our network management products include developer kits, application programming interfaces, and services to support customer integration into legacy systems and the integration of third party products that complement our network management product portfolio.

Service

In addition to our product offerings, we provide a broad range of service offerings, including technical support services and advanced services. Technical support services are designed to help ensure that our products operate efficiently, remain highly available, and benefit from the most up-to-date system software. These services help customers to protect their network investments and minimize downtime for systems running

mission-critical applications. Advanced services is a comprehensive program that provides responsive, preventive, and consultative support of our technologies for specific networking needs. The advanced services program supports networking devices, applications, and complete infrastructures.

Customers and Markets

Our customers' networking needs are influenced by numerous factors, including the size of the organization, number and types of computer systems, geographic location, and the applications requiring communications. Our customer base is not concentrated in any particular industry. In each of the past three fiscal years, no single customer has accounted for 10 percent or more of our net sales. Our customers are primarily in the following markets:

Large Enterprise Businesses

We define large enterprise businesses generally as regional, national, or global organizations with 1,000 or more employees in multiple locations or branch offices. They have complex IT infrastructure and networking needs within a multivendor environment. Our large enterprise customers include government, education, and healthcare organizations and retail, finance, manufacturing, and transportation enterprises. Cisco creates and delivers solutions in collaboration with third-party application and hardware vendors and channel partners taking advantage of Cisco's products and advanced technology solutions such as enterprise routing, switching, security, IP telephony, mobility, and storage. We also offer a wide variety of services, including service and support packages, financing, and managed service offerings through our service provider partners.

DECLARATION OF ERIC BRUNO

WC Docket No. 05-25

EXHIBIT 33

REDACTED - FOR PUBLIC INSPECTION

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UNITED STATES
SECURITIES AND EXCHANGE
COMMISSION
Washington, D.C. 20549

FORM 10-K

- Annual report pursuant to
Section 13 or 15(d) of
the Securities Exchange Act of
1934

For the fiscal year ended December 31, 2004

- Transition report pursuant to
Section 13 or 15(d) of
the Securities Exchange Act of
1934

For the transition period from _____ to

Commission file number 001-07260

NORTEL NETWORKS CORPORATION

(Exact name of registrant as specified in its charter)

<p>Canada (State or other jurisdiction of incorporation or organization)</p>	<p>Not Applicable (I.R.S. Employer Identification No.)</p>
<p>8200 Dixie Road, Suite 100, Brampton, Ontario, Canada (Address of principal executive offices)</p>	<p>L6T 5P6 (Zip Code)</p>

Registrant's telephone number including area code:
(905) 863-0000

**Securities registered pursuant to Section 12(b) of
the Act:**

<p>Title of each class Common Shares without nominal or</p>	<p>Name of each exchange on which registered</p>
--	---

par value	New York Stock
4.25% Convertible	Exchange
Senior Notes Due	New York Stock
2008	Exchange

The common shares are also listed on the Toronto Stock Exchange in Canada

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes No

On March 31, 2005, 4,268,236,086 common shares of Nortel Networks Corporation were issued and outstanding. Non-affiliates of the registrant held 4,262,570,785 common shares having an aggregate market value of \$11,686,818,243 based upon the last sale price on the New York Stock Exchange on March 31, 2005, of \$2.73 per share; for purposes of this calculation, shares held by directors and executive officers have been excluded.

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- Enhancements to our multimedia communications portfolio, that will allow a service provider to offer intelligent multimedia services across any manufacturer's circuit switches. Additionally, development will focus on increasing the breadth and usability of multimedia communications applications.
- Additions to the digital, circuit-based telephone switch portfolio that will allow service providers to offer and manage IP voice and multimedia (Centrex IP) services to those businesses that use traditional business telephones as well as businesses that use next generation telephones designed for use in IP networks.
- Enhancements to our IP services router that enable an increase in the number of residential subscribers and virtual private network sites that can be supported, and the amount of bandwidth that can be applied to an enterprise site. Development will also focus on enhancing the ability of our service provider customers to provide additional revenue-generating services.
- A focus on cable standards compliance to enhance our solutions for the cable operator markets in the United States, Canada and EMEA, including support for the open cable standard protocol for cable media gateways.
- Enhancements to our WAN switch portfolio to improve interoperability with other vendors' products. In addition, development will focus on enhancing the migration to converged networks which simultaneously support data, voice and multimedia.
- Continued development of a multiservice provider edge networking device designed to converge multiple communications services operating at the IP or multi-protocol label switching network edge. This device is currently undergoing customer trials and is not yet generally available. As well, we continue to develop enhancements to our existing line of WAN switch and IP service router products that are intended to efficiently aggregate different types of data traffic at the network edge.
- Continued integration of a service provider core network router into our voice over packet portfolio to enable us to provide a complete end-to-end solution.

Markets

With the growth of data, voice and multimedia communications over the public telephone network, the public Internet and private voice and data communications networks, there is an increasing opportunity to converge disparate networks towards a single, high performance packet network that can support most types of communications traffic and applications. Converged voice and data networks also provide an opportunity for service providers to offer new revenue-generating services while reducing their ongoing operational costs year over year as they incorporate packet-based technology in their networks. We believe our advantage lies in our ability to transition and upgrade our customers' installed base of voice and data network solutions to a multimedia-enabled IP network.

To meet the growing demand for new revenue generating services and network efficiency, we anticipate growth in demand for packet-based networking equipment that supports the convergence of data, voice and multimedia communications over a single communications network and that provides greater network capacity, reliability, speed, quality and performance. We anticipate a continued increase in deployments of service provider Voice over IP networks worldwide. While we anticipate growth in Voice over IP networks, we also anticipate a decline in traditional voice networks.

Cable operators and new Internet telephone service providers are entering the voice and data markets and are increasing the competitive pressure on established service providers. For example, cable operators provide high speed data services as well as voice services by using Voice over IP technology. Similarly, established service providers are using existing broadband networks and expanding those broadband networks to offer bundled services such as telephone, high speed Internet and television services across those broadband networks. As a result of this increased competitive pressure as well as regulatory changes, the pace of consolidation among service providers in the United States has increased.

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- Additions to the applications in our communications server products to allow integration of Voice over IP, voice extensible markup language, new operating systems and servers, and voice recognition speech products.
- New developments in data networking products that will deliver resiliency, enable increased data network traffic and provide suitable service levels and network connectivity and power to devices over the same line.
- The development of the next generation web platform, which will feature higher performance, scalability (that is, the ability to grow a service or capability with incremental cost) and integrated applications.
- Enhancements to our security portfolio including the new secure sockets layer, or SSL, and switching products and a new high-end secure router product. In addition, we have entered into and continue to pursue strategic relationships that enhance our end-to-end security solutions.
- Updates to our customer premises-based telephone systems to support our software that enables those systems to function entirely as a packet-based system or as a hybrid packet and circuit switching system.

Markets

We offer Enterprise Networks products to enterprises around the world. With the growth of data, voice and multimedia communications over the public telephone network, the public Internet and private voice and data communications networks, there is an increasing opportunity to converge disparate networks towards a single, high performance network that can support various types of communications traffic and applications.

We believe that in order to meet the growing demand for increased capacity at lower per-minute rates, enterprises will transition their circuit-based voice communications to more cost effective packet-based technologies. As a result, demand for packet-based networking equipment that supports the convergence of data, voice and multimedia communications over a single communications network and that provides greater network capacity, reliability, speed, quality and performance is increasing.

Globally, enterprise customers continue to invest in equipment for their communications networks, primarily for network security and resiliency, for Voice over IP, WLANs and for virtual private networks. In the United States and Canada, enterprise customers are investing in Voice over IP as they transition from traditional voice products to our enterprise line of communication servers and remote gateway products that enable conversion from voice communication networks to packet-based networks supporting data, voice and multimedia communications. In EMEA, our customers are beginning to invest in new technologies, such as Voice over IP. In the Asia Pacific region, Enterprise Networks customers are investing in networking equipment to improve the connections among their regional sites and branch offices. In CALA, enterprises are continuing to drive demand for networking equipment that supports the growing use of the Internet in the region.

Customers

We offer our products and services to a broad range of enterprise customers around the world, including large businesses and their branch offices, small businesses and home offices, as well as government agencies, educational and other institutions and utility organizations. Key industry sectors for our business customers include the telecommunications, high-technology manufacturing, government (including the defense sector) and financial services sectors. We also serve customers in the healthcare, retail, education, hospitality, services, transportation and other industry sectors. We are currently focused on increasing our market presence with enterprise customers. In particular, we intend to focus on leading enterprise customers with high performance networking needs. Certain of our service provider customers, as well as system integrators, also act as distribution channels for our Enterprise Networks sales. None of our Enterprise Networks customers represented more than 10% of Nortel's consolidated revenues in 2004.

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DECLARATION OF ERIC BRUNO

WC Docket No. 05-25

EXHIBIT 34

REDACTED - FOR PUBLIC INSPECTION

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Unbundled Access to Network Elements)	WC Docket No. 04-313
)	
Review of the Section 251 Unbundling)	CC Docket No. 01-338
Obligations of Incumbent Local)	
Exchange Carriers)	

UNE FACT REPORT 2004

**Prepared for and Submitted by
BellSouth, SBC, Qwest, and Verizon**

October 2004

Peter W. Huber
Evan T. Leo
Kellogg, Huber, Hansen, Todd & Evans, P.L.L.C.
1615 M Street, N.W.
Washington, DC 20036
(202) 326-7900

d. Locations Reached by Other Competitive Alternatives

As demonstrated above, most business customers located within wire centers with 5,000 or more business lines are within easy reach of competitive fiber. These customers can also be served by a number of other competitive alternatives – fixed wireless, cable, and special access.

Fixed Wireless. As described above, wireline CLECs, cable operators, and third-party suppliers are all now using fixed wireless links to link existing fiber networks to nearby customers at off-network locations. The Commission has certainly allocated and assigned abundant amounts of spectrum for the provision of fixed wireless services. Fixed wireless carriers are now operating in the licensed 24 GHz and 39 GHz bands, as well as in the unlicensed 5.8 GHz band. Collectively, there is at least 2.9 GHz worth of licensed spectrum allocated to these services,¹²⁰ which is vastly underutilized at present, and in no danger of being exhausted even as usage grows.¹²¹ A December 2003 study by In-Stat/MDR found that 40 percent of “enterprises” (businesses with 1,000 or more employees), 29 percent of the “middle market” (businesses with between 100 and 999 employees), and 23 percent of small businesses (business with 5-99 employees) were currently using fixed wireless for some high-capacity services, and that another 54 percent, 44 percent, and 35 percent, respectively, plan to use fixed wireless within the next 12 months.¹²² As these totals demonstrate, and as discussed above, early technical shortcomings with fixed wireless have now been overcome.

Cable. Cable networks provide yet another layer of geographic coverage. Either directly or through an affiliate, each of the nation’s major cable operators is now actively pursuing large business customers, both by deploying fiber in urban areas, and by extending their hybrid fiber/coaxial networks to provide cable modem services to business locations. See Table 19. Based on information contained on their websites, cable companies appear to be offering service to business customers in at least 90 MSAs.¹²³

means that these carriers self-provide approximately \$1.8B and \$800M, respectively, of special access service. See J. Hodulik, *et al.*, UBS, *Paying to Play: How Access Charges Determine Winners and Losers in Telecom Services* at 27 (Apr. 2, 2004). More recently, UBS noted that MCI told investors it was providing 28% of its high-capacity circuits on-net, which would more than double the amount of MCI’s self-provision. See J. Hodulik, *et al.*, UBS, *Long Distance Update: No Sign of Improvement in Business Market* at 5 (May 28, 2004).

¹²⁰ See Wireless Competition Bureau, FCC, *LMDS Band Allocation*, <http://wireless.fcc.gov/auctions/data/bandplans/lmds.pdf> (1300 MHz allocated); Wireless Competition Bureau, FCC, *39 GHz Band Allocation*, <http://wireless.fcc.gov/auctions/data/bandplans/39band.pdf> (1400 MHz allocated); M. McCormack, *et al.*, Bear Stearns/TMNG, *Wireless Broadband: The Impact of 802 Technology* at 34, Exhibit 22 (June 2004) (200 MHz allocated for MMDS services). In addition, fixed wireless providers are using the 200 MHz of spectrum in the 5.8 GHz unlicensed band, as well as other unlicensed bands. See *id.*

¹²¹ See C. Larsen, *et al.*, Prudential Equity Group, *Wireless Services: CTIA Trade Show Take-Aways* at 2 (Mar. 24, 2004) (Spectrum “like MMDS and ITFS” is “currently lying fallow.”).

¹²² *In-Stat/MDR Private Line Report* at 19, Tables 9 & 10.

¹²³ See Cox Business Services, *Carrier Markets*, <http://www.coxbusiness.com/carriermarkets.pdf> (carrier services in 23 MSAs); Lightpath, *About Lightpath*, <http://www.lightpath.net/Interior7.html> (business service in 1 MSA); Comcast Commercial Services, *Our Network*, <http://www.comcastcommercial.com/index.php?option=content&task=view&id=4&Itemid=34> (“Presence in 22 of the top 25 US markets”); Time Warner Telecom, *Dedicated High Capacity Services*, <http://www.twtelecom.com/Documents/Resources/PDF/MarketingCollateral/>

Analysts estimate that nearly 60 percent of “small- to medium-sized businesses (SMB) are located within a few hundred feet of the local hybrid fiber/coaxial network,”¹²⁴ and that roughly 25 percent already have a cable drop.¹²⁵ And cable operators have been rapidly expanding their networks to make service even more widely available.¹²⁶ A recent study by In-Stat/MDR found that 41 percent of “enterprises,” 32 percent of “middle market” businesses, and 44 percent of small businesses were using cable modem service in their main offices for some high-capacity services.¹²⁷ An increasing number of business customers are using cable modem service in lieu of traditional special access and private line services.¹²⁸

1701.1DedicedHighCapac.pdf (Time Warner Telecom serves 41 MSAs); Road Runner Business Class, *National Presence*, <http://www.rrbiz.com/RoadRunner/index.asp?sid=1> (Road Runner Business Service in 46 MSAs); Charter Business Networks, <http://www.charter-business.com/default.htm> (business service in 35 states); TelCove, *Fiber Infrastructure*, <http://www.telcove.com/network/090304%20Network%20Infra.pdf> (TelCove, formerly Adelphia Business Solutions, offers service in 48 MSAs).

¹²⁴ J. Shim & R. Read, Credit Lyonnais Securities, *The U.S. Cable Industry – Act I* at 196 (Nov. 20, 2002) (estimating six million SMBs within a few hundred feet); see also K. Burney, In-Stat/MDR, *The Big Comeback? Excerpts from ‘Business Broadband in a Changed Economy’* at 2, 4 & Fig. 2 (May 2002) (there are an estimated 10.5 million small and medium businesses nationwide (2.2 million with 5-99 employees, 85,000 with 100-999 employees, and 8.2 million characterized as small office/home office)); Citigroup Smith Barney, *Cable: Capitalizing on the SME Opportunity; Detailed Note* (June 4, 2003) (30 to 50 percent of the small- and medium-enterprise market is located within 50 to 100 feet of existing cable modem networks).

¹²⁵ J. Shim & R. Read, Credit Lyonnais Securities, *The U.S. Cable Industry – Act I* at 196 (Nov. 20, 2002) (estimating 2.5 million SMBs passed by existing cable infrastructure); D. Sweeney, *Cable’s Plumb Position, America’s Network* (July 1, 2002) (Jedai Networks, which develops equipment “intended to enable [cable] MSOs to serve business customers,” estimates “that roughly 25% of businesses already have a cable drop, including many in downtown office buildings.”).

¹²⁶ See, e.g., D. Chang, EVP, Finance & Strategy, Charter Communications, presentation before the JP Morgan High Yield Conference, at 23 (Feb. 2, 2004) (Charter is moving “‘up-market’ to compete in Enterprise RFP environment”); Comm. Daily at 7 (Feb. 2, 2004) (RCN “[s]igned several agreements to expand its business” to provide “voice, video, data, business cable, Internet access, transport,” to “customers including universities, hospitals, and the financial and legal industries.”); J. Hayes & B. Stemper, Cox Communications, presentation before the UBS Media Week Conference, at 23 (Dec. 2003) (noting that one of the major plans for Cox Business Services in 2004 was to “[e]xpand [the] capabilities of the HFC infrastructure.”).

¹²⁷ *In-Stat/MDR Private Line Report* at 19, Tables 9 & 10.

¹²⁸ See, e.g., C. Munroe, IDC, *U.S. Private Line Services Forecast and Analysis, 2002-2007* at 1 (Dec. 2003). (Special access revenues are declining “due to continued decline in price on a per-megabit basis, as well as competition from broadband circuits in the form of DSL and cable modem adoption by enterprises.”); *In-Stat/MDR Private Line Report* at 12 (“As broadband offerings penetrate businesses in more ways, including in home offices, they will become a more compelling replacement to good, ole’ private lines.”).

Table 19. Cable Serving Business Customers		
	Fiber	Cable Modem
Cablevision	“Lightpath owns, installs and operates its own advanced fiber-optic network facility, comprising over 10,000 route miles of fiber-optic cable that connects . . . to more than 1500” buildings	Business Class Optimum Online for small businesses offers connection speeds up to 10 Mbps downstream and 1 Mbps upstream. “[T]he business sector opportunity has ‘actually helped us build the network into the business areas and business parks.’”
Time Warner	“We’ve got an infrastructure there that is just ripe for commercial services. . . . We pass 1.2 million businesses” “Delivering cost effective, high capacity access solutions to several Fortune 500 customers.” Provides service to 149,000 business customers as of the end of 2Q04.	According to the company, “[c]able is not incredibly difficult to get to the business,” and “[m]ost RBOCs, CLECs and ILECs have ignored that space.” “[V]iews the SMB market as a high-growth opportunity.” “We do have an opportunity to go more aggressively after the enterprise business”
Charter	Moving “‘up-market’ to compete in Enterprise RFP environment” 9 percent of business subscribers are medium or large businesses.	Business Internet Service is designed for “a small organization seeking a cost-effective, reliable connection to the Internet.” “[O]ver 600,000 small- and medium-sized businesses located within reach of our networks”
Comcast	“Comcast Commercial Services leverages the massive network of our parent company. This allows you to have managed access on a carrier class transport network designed for broadband applications. It’s reach is broad and deep, with capacity in dense urban, sprawling suburban and even many rural areas others don’t reach.” “Comcast has been delivering service to commercial organizations since 1995 and has thousands of customers leveraging the Comcast network for critical business applications. Comcast delivers unique service capabilities on our own national network, which allows you to have reliable service and competitive rates.”	Targets “SMBs with 1-100 employees,” “Non-profit orgs, schools, government,” and “SMBs and Enterprises with telecommuters.”
Cox	“over 100,000 customers in over 18 markets” More than 320,000 businesses with “a total telecom spend of roughly \$3.3 billion annually” lie within 100 feet of Cox’s network Expected to “reach more than 25% of businesses within its franchise” at YE04	“[S]erves 19 of the Cox cable markets, covering more than 90 percent of Cox’s overall footprint nationally, marketing basic data and video services aggressively to small- and medium-sized businesses the company can easily serve with current network connections.”
RCN	“Signed several agreements to expand its business” to provide “voice, video, data, business cable, Internet access, transport,” to “customers including universities, hospitals, and the financial and legal industries.”	

Sources: See Appendix H.

Terabeam. R. Krause, *Terabeam CEO Says 'Free-Space Optics' Firm's Prospects Look Good*, Investor's Business Daily (Apr. 3, 2003).

WiTel. WiTel Press Release, *WiTel Adds Fixed Wireless Access to Extended On-Net* (May 17, 2004).

Table 16. Fixed Wireless Providers Offering Wholesale Services

airBand. airBand, *Data Services*, <http://www.airband.com/products/data.html>.

Conterra. Conterra, *FAQs*, <http://www2.conterra.com/DesktopDefault.aspx?tabid=187>.

First Avenue Networks. First Avenue Networks, *Products*, <http://www.firstavenet.com/index.html>; D. O'Shea, *First Avenue Launches Spectrum Leasing*, *Wireless Review* (Oct. 27, 2003), http://www.firstavenet.com/pitt/telephony_10_27_03.pdf.

IDT Solutions. IDT Solutions Press Release, *IDT Unveils Spectrum-Leasing Strategy* (June 16, 2003).

NextWeb. K. Henderson, *Fixed Wireless Round Two: Metro Wholesalers Step Back in the RF Ring*, *Phone+* (Feb. 2004), <http://www.phoneplusmag.com/articles/421carrier01.html>.

Teligent. Teligent, *Broadband Access*, <http://www.teligent.com/broadbandtg.htm>; Teligent Press Release, *Teligent Completes Its Reorganization – Company Exits Bankruptcy Fully Funded and Debt Free* (Sept. 12, 2002).

WindChannel. WindChannel, *Carrier Service Solutions*, <http://www.windchannel.com/carriers/services.php>.

XO. K. Henderson, *Fixed Wireless Round Two: Metro Wholesalers Step Back in the RF Ring*, *Phone+* (Feb. 2004), <http://www.phoneplusmag.com/articles/421carrier01.html>.

Table 18. Local Fiber Networks of IXC's That Supply Dark Fiber

WiTel. WiTel Communications Group, Inc., Form 10-K (SEC filed Mar. 27, 2003).

Level 3. Level 3: Level 3, *(3)Link Metro Private Line*, <http://www.level3.com/557.html>.

Global Crossing. Global Crossing Press Release, *Global Crossing Reports 2000 Pro Forma Cash Revenue Up 36%, Recurring Adjusted Up 54% from 1999* (Feb. 14, 2001).

Qwest. Qwest, *Metro Private Line*, http://www.qwest.com/pcat/large_business/product/1,1354,1145_4_2,00.html.

MSAs. United States Census Bureau, *Metropolitan and Micropolitan Statistical Areas and Components, December 2003, With Codes* (Feb. 25, 2004), <http://www.census.gov/population/estimates/metro-city/0312mfips.txt>.

Table 19. Cable Serving Business Customers

Cablevision. Cablevision Lightpath, *Inside Lightpath*, <http://www.lightpath.net/inside/index.html>; Optimum Online, *Business Services*, http://www.optimum.com/index.jhtml?pageType=info_bcool; J. Barthold, *Small Business, Big Money, No Guarantees*, *Telephony Online* (Aug. 12, 2002) (quoting Kevin Curran, senior vice president of marketing and sales for Cablevision Lightpath), http://telephonyonline.com/ar/telecom_small_business_big/index.htm.

Time Warner. A. Figler, *Turning Businesses into Customers*, *CableWorld* (Dec. 9, 2002) (quoting Ken Fitzpatrick, senior vice president of commercial services for Time Warner Cable); Road Runner Business Class, *Internet Access*, <http://www.twcbroadband.com/solutions/internet.cfm>; M. Stump, *Road Runner Gears Up 'Business Class' Offer*, *Multichannel News* (Feb. 25, 2002) (quoting Jason Welz, vice president of commercial services for Road Runner); J. Barthold, *Small Business, Big Money, No Guarantees*, *Telephony Online* (Aug. 12, 2002), http://telephonyonline.com/ar/telecom_small_business_big/index.htm; Thomson StreetEvents, *TWX – Q2 2004 Time Warner Inc. Earnings Conference Call – Final Transcript* at 8 (July 28, 2004).

Charter. D. Chang, EVP, Finance & Strategy, Charter Communications, presentation before the JP Morgan High Yield Conference (Feb. 2, 2004); Charter Communications, presentation before the UBS Media Week Conference, at 19 (Dec. 11, 2003) (reporting that 91% of business customers are small businesses); Charter Business, <http://www.charter-business.com/default.htm>; A. Figler, *Turning Businesses into Customers*, *CableWorld* (Dec. 9, 2002) (quoting Charter Communications spokesman David Andersen).

Comcast. Comcast Commercial Services, *Solutions: Telecommunications*, <http://www.comcastcommercial.com/index.php?option=content&task=view&id=33&Itemid=71>; Comcast Commercial Services, *Services*, <http://www.comcastcommercial.com/index.php?option=content&task=view&id=6&Itemid=27>; Comcast Commercial Services, *Comcast Network Service*, <http://www.comcastcommercial.com/index.php?option=content&task=view&id=43>; J. Livingood, Director of Comcast Commercial Internet Services, *Overview of Cable Modem Offerings for Businesses in Maryland* (Aug. 15, 2002), www.marylandtedco.org/programs/PDF/MACO_Comcast.pdf.

Cox. Cox Communications, presentation before the UBS Media Week Conference (Dec. 2003); Jim Robbins, President and CEO, Cox Communications, presentation to the Sanford Bernstein 19th Annual Strategic Decisions Conference (June 2003); D. Hayes, *Pickers' Dilemma*, CED (Sept. 2002), <http://www.cedmagazine.com/ced/2002/0902/09a.htm>; *A Snapshot of the Cox Business Strategy*, Interview with Coby Sillers, Vice President and General Manager for Cox Business Services, Xchange Mag. (June 1, 2003), <http://www.xchangemag.com/articles/361buzserv3.html>; J. Rief-Cohen, *et al.*, Merrill Lynch, *Cox Communications: Chasing Profits and the 4 Million Non-Video Homes* at 6 (July 30, 2004).

RCN. Comm. Daily at 7 (Feb. 2, 2004).

APPENDIX A. MASS-MARKET BROADBAND COMPETITION: SEPTEMBER 2004

Table 2. Current Residential Offerings by DSL and Cable Modem Providers

Verizon. Verizon, *Internet Access – DSL: Prices and Packages*, <http://www22.verizon.com/forhomedsl/channels/dsl/package+price.asp>; Verizon, *Verizon Freedom All*, http://www22.verizon.com/customerhelp/cgi-bin/smarthelp.asp?env=www22&new&kb=consumer&varset_statename=VAE&varset_coast=East&case=30907; Verizon Press Release, *Verizon Online Adds New High-Speed Lane to the Internet for Consumers and Businesses* (Sept. 7 2004).

SBC. SBC, *SBC Yahoo! DSL Express Package*, http://www05.sbc.com/DSL_new/content/1,,48,00.html; SBC, *SBC Yahoo! DSL Pro Package*, http://www02.sbc.com/DSL_new/content/1,,92,00.html?

BellSouth. BellSouth, *Product Comparison*, http://www.fastaccess.com/content/consumer/product_comparison.jsp.

Qwest. Qwest, *High-speed Internet*, <http://www.qwest.com/residential/products/dsl/index.html>.

Comcast. Comcast, *Select a Package*, <http://www.comcast.com/buyflow/default.ashx>; G. Campbell, *et al.*, Merrill Lynch, *Everything Over IP* at Table 2 (Mar. 12, 2004).

Cablevision. Cablevision Optimum Online, *Pricing*, <http://www.optimumonline.com/index.jhtml?pageType=pricing>; G. Campbell, *et al.*, Merrill Lynch, *Everything Over IP* at Table 2 (Mar. 12, 2004).

Cox. Cox, *Digital Cable: Current Rates*, <http://www.cox.com/Fairfax/Rates.asp>.

Time Warner. Road Runner, *Road Runner High Speed Online: Overview*, <http://www3.twnyc.com/NASApp/CS/ContentServer?pagename=twnyc/internet&mysect=internet/roadrunner>.

Table 3. Current Small Business Offerings by DSL and Cable Modem Providers

Verizon. Verizon, *Internet Access – DSL: Prices and Packages*, <http://biz.verizon.net/pands/dsl/packages/Default.asp>.

SBC. SBC, *Symmetric DSL Internet Services*, http://www01.sbc.com/DSL_new/content/1,,67,00.html?; SBC, *SBC Yahoo! DSL Special Offers*, http://www02.sbc.com/DSL_new/content/1,,21,00.html?pl_code=MSBC245C8952P192222B0S0.

Covad. Covad, *TeleSpeed Business DSL*, <http://www.covad.com/products/access/telespeed/comparisons.shtml>.

AT&T. AT&T Business, *Small & Medium Business: DSL Internet Service*, http://businesssales.att.com/products_services/dslinternet_available.jhtml?_requestid=76704.

Time Warner. Road Runner, *Products & Services: Access*, <http://rbiz.com/products/acc.asp>; Road Runner Business Class, *Pricing & Services*, <http://www.roadrunnerbiz.com/packages.shtml> (pricing for 1.5-4 Mbps downstream/384 kbps-1.5 Mbps upstream packages).

Comcast Business Communications. Comcast Business Communications, *Comcast Workplace*, <http://work.comcast.net/workplace.asp#pricing>.

Cablevision. Lightpath, *Internet: BusinessClass Optimum Online*, http://www.optimum.com/index.jhtml?pageType=pricing_bcool; Lightpath, *Internet: BusinessClass Optimum Online Package Rates*, http://www.optimum.com/index.jhtml?pageType=info_bcool. Cablevision also offers business-class service to not-for-profit customers for \$74.95, when purchased as part of a bundle. *Id.*

Table 4. Recent Changes in Cable/DSL Competitive Offerings and Promotions

Verizon. Verizon News Release *Verizon Offers Free Wireless Router with Rebate Promotion To Keep Everyone in the Family Online with DSL* (Apr. 13, 2004); Verizon News Release, *Verizon Online Triples DSL Upstream Speed and Slashes DSL Price* (June 2, 2004); Verizon News Release, *Verizon Online Adds New High-Speed Lane to the Internet for Consumers and Businesses* (Sept. 7, 2004).

SBC. G. Campbell, *et al.*, Merrill Lynch, *3Q03 Broadband Update: The Latest on Broadband Data and VoIP Services in the U.S. and Canada* at Table 4 (Nov. 3, 2003) (“*Merrill Lynch 3Q03 Broadband Update*”); D. Barden, *et al.*, Banc of America Securities, *SBC Communications Inc.* (Feb. 2, 2004); SBC News Release, *SBC Yahoo! DSL Returns to Best-Ever Price of \$26.95 A Month For High Speed Internet Service* (Apr. 27, 2004); SBC News Release, *All New SBC Yahoo! DSL Express Customers Pay Less Than \$30 a Month When Ordering before End of June* (June