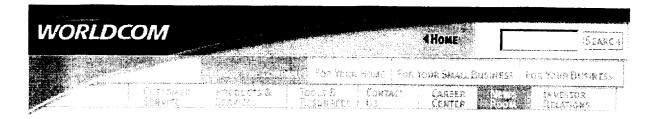
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### WorldCom Seeks Broadband Fixed Wireless Authority

Licensing Step Moves WorldCom Closer To Market Launch In

### STOCK PRICE

\$36.6875 | WCOM

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### Keeping In Touch

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  •Arrange a Conference
  Call
- •Find an International Country Code

### Travel Help

•International Access Numbers

### Site Help •Site Map

CLINTON, Miss. (Aug. 14, 2000) – WorldCom, Inc. (NASDAQ: WCOM) is filing its first round of applications for licensing authority to offer broadband fixed wireless services in more than 60 markets nationwide including major cities such as Boston, Providence, Pittsburgh and San Antonio and smaller cities including Jackson, MS, Memphis, Buffalo and Norfolk, VA.

First Quarter 2001

Today marks the opening of the Federal Communications Commission's filing window for accepting applications for two-way services in the fixed wireless radio band known as Multichannel Multipoint Distribution Service (MMDS) and Instructional Television Fixed Services (ITFS). Today's action moves WorldCom closer to fulfilling the Commission's vision of using this spectrum for broadband services. Previously, the spectrum had been authorized only for the delivery of one-way video programming.

### CONTACTS

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"Our applications move us one step closer to market launch," said John Stupka, president of WorldCom Wireless Solutions. "We'll work with the FCC and other spectrum holders to make this a speedy and smooth licensing process."

Licensing authority is required in each of WorldCom's 160 markets before commercial services are launched. Complete applications will be placed on public notice for a 60-day period. If no petitions to deny are filed, the application will automatically be deemed granted. WorldCom will file its initial round of applications during this week's FCC filing window. Applications for additional markets will be made during upcoming FCC filing windows.

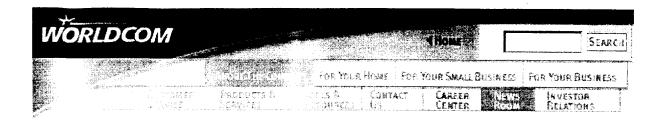
As part of its "generation d" initiative, WorldCom will leverage its fixed wireless assets with other broadband technology solutions to offer customers the best high-speed access solution to meet the customer's needs. WorldCom's five market trials of fixed wireless technology are on track as WorldCom prepares for a successful commercial launch, beginning in the fourth quarter of this year and continuing into early next year.

"We're gearing up for a broadband launch in Memphis, which will serve as the model market for offering our customers multiple solutions for high-speed access services," Stupka explained. "Broadband fixed wireless gives our customers a competitive, reliable choice for high-speed access especially in markets where few, if any, options exist."

WorldCom (NASDAQ: WCOM) is a global leader in "all-distance" communications services with operations in more than 65 countries. Revenues in 1999 were \$37 billion, with more than \$15 billion from high-growth data, Internet and international services. WorldCom provides facilities-based and fully integrated services to facilitate e-business and e-commerce in the digital generation. For more information go to http://www.wcom.com.

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### MCI WORLDCOM ANNOUNCES 'FIXED WIRELESS' SERVICE TRIALS

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    Numbers
- Site Help
  Site Map

High-Speed Wireless Data Service Trials Underway In Jackson, Baton Rouge, and Memphis

CLINTON, Miss. (March 7, 2000) – MCI WorldCom today announced an initial step in bringing a competitive alternative for high-speed data services to customers in markets that lack a speedy option for Internet and broadband services. The market trials underway in Jackson, Miss., Baton Rouge, La., and Memphis, Tenn., mark the start of MCI WorldCom's "fixed wireless" strategy to offer two-way, high-speed access to customers less likely to be touched by the cable broadband monopolies and the "Mega-Bell" local phone companies.

"Our wireless strategy makes perfect sense in markets where customers have little, if any, choice for high-speed connectivity," said John Stupka, President of MCI WorldCom Wireless Solutions. "With the technology we have in place, wireless lets us immediately serve residential and business customers in these markets – which is exactly what we're doing today."

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The Jackson, Baton Rouge, and Memphis service trials are an initial step of MCI WorldCom's overall strategic efforts to offer high-speed, broadband services using radio spectrum designated for an advanced technology, known as Multichannel Multipoint Distribution Service (MMDS), capable of serving a 35-mile radius.

The current service trials operate on similar frequencies as MMDS (2.1 Gigahertz and 2.5-2.7 GHz) in the Wireless Communication Service (WCS) band (2.3 GHz). MCI WorldCom will roll out commercial MMDS service later this year after FCC licensing approval has been granted.

"As we test and build out our MMDS platform in larger cities, our service market trials will be hosted in smaller cities where we have existing wireless assets," Stupka explained. "By market testing now, we'll be able to offer our customers in certain markets a competitive package of broadband services by the end of the year."

In Jackson, Baton Rouge and Memphis, hundreds of customers – including residential customers, small- and medium-sized businesses, and schools – are using MCI WorldCom's "WarpOne" and "Warp 310"

wireless broadband services. WarpOne offers business customers Internet and web-hosting services with scaleable bandwidth at speeds as fast as digital subscriber line (DSL) service.

Warp 310 Internet access service offers residential users wireless, high-speed connectivity at 310 Kilobits per second (Kbps), solidly beating the fastest dial-up modems. Warp 310 high-speed Internet service is designed initially for residences in apartment complexes that can be served via a wireless local area network, and soon Warp 310 service will be available to residences in entire neighborhoods. At \$39.95 a month, Warp 310 customers receive unlimited usage without the extra cost of an additional phone line into the home.

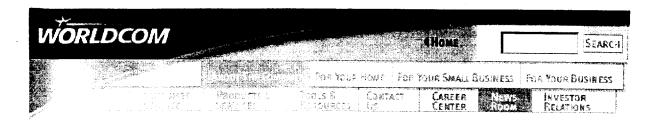
"Getting connected to Warp 310 service is as easy as 1, 2, 3 – call to sign up for service, pop a card into your PC and you're ready to go," Stupka said.

In several larger markets, MMDS technology field tests will start in early 2000 so that by late 2001, the merged MCI WorldCom and Sprint will offer its broadband "fixed wireless" service to customers in more than 100 cities. It is the combination of MCI WorldCom and Sprint MMDS that will allow accelerated deployment of these assets to rural areas and markets traditionally underserved by the cable and local phone monopolies.

MCI WorldCom (NASDAQ: WCOM) is a global leader in "all-distance" communications services with operations in more than 65 countries. Revenues in 1999 were \$37 billion, with more than \$15 billion from high-growth data, Internet and international services. MCI WorldCom and Sprint have announced a merger agreement, which the companies expect to close in the second half of 2000 after regulatory and shareholder approvals. For more information go to http://www.wcom.com.

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### MCI WORLDCOM ADDS DALLAS TO 'FIXED WIRELESS' SERVICE TRIALS

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Momentum builds behind market trials for high-speed, wireless broadband services

Cisco and Motorola selected to jointly develop 'MMDS' technology

DALLAS, Tex. (April 5, 2000) – MCI WorldCom today announced Dallas as the fifth market for testing cutting-edge wireless technology which soon will offer customers a new, competitive alternative for high-speed, broadband service. The Dallas trial is the latest step in MCI WorldCom's overall strategic efforts to offer high-speed, broadband services using radio spectrum designated for an advanced technology known as Multichannel Multipoint Distribution Service (MMDS).

"The Dallas / Ft. Worth area is an ideal incubator for our MMDS trials," said John Stupka, President of MCI WorldCom Wireless Solutions. "The lessons we learn here we can apply to any of the markets we cover – from rural areas with no choice for high-speed Internet service to markets not wired for DSL or cable modem service."

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With the merger of MCI WorldCom and Sprint, the combined company will offer its broadband "fixed wireless" service to customers in more than 100 markets by late 2001. It is the combination of MCI WorldCom and Sprint MMDS assets that will allow accelerated deployment of wireless broadband services to rural areas and markets traditionally underserved by the cable and local phone companies.

By using MMDS technology, MCI WorldCom will offer customers wireless Internet and broadband services at speeds far greater than traditional copper phone lines or cable modems.

For the Dallas field test, MCI WorldCom will deploy an end-to-end MMDS solution developed by technology partners Cisco Systems, Inc. of San Jose, Calif., and Motorola, Inc., of Schaumburg, III. Using Cisco's Vector Orthogonal Frequency Division Multiplexing (VOFDM) technology ensures a more reliable signal to customer locations previously out of reach due to line-of-sight issues.

"Cisco is delighted to work with MCI WorldCom to enable broadband access services such as high-speed Internet, virtual private networks and voice applications," said Constantin Loudiadis, Vice President and General Manager, Wireless Access Business Unit at Cisco. "Cisco is excited to demonstrate the superior value of VOFDM technology, which will lower deployment costs and increase subscriber coverage in non-line-of-sight conditions. In early test trials, VOFDM has proven to perform error free in markets like Dallas where conventional single carrier QAM solutions are significantly challenged."

"Together, Motorola and Cisco, have created a powerful alliance, which continues to expand with the addition of collaboration for MMDS and VOFDM technologies," said Rickie Currens, Motorola Corporate Vice President and Group General Manager. "We believe the combination of Motorola's RF and infrastructure capability together with Cisco's networking expertise form a powerful team to address MCI WorldCom's broadband wireless access needs."

MCI WorldCom MMDS service trials with schools, residential and business customers are underway in Jackson, Miss., Baton Rouge, La., and Memphis, Tenn. Trials in the Dallas / Ft. Worth area and Boston will begin in the coming weeks.

"Market reaction to our existing service trials has been overwhelmingly positive," said Stupka. "We'll run similar service trials in Dallas this summer using a mix of customers before we roll out service by the end of the year."

MCI WorldCom (NASDAQ: WCOM) is a global leader in "all-distance" communications services with operations in more than 65 countries. Revenues in 1999 were \$37 billion, with more than \$15 billion from high-growth data, Internet and international services. MCI WorldCom and Sprint have announced a merger agreement, which the companies expect to close in the second half of 2000 after regulatory and shareholder approvals. For more information go to http://www.wcom.com.

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For Immediate Release

### SPRINT FILES FOR TWO-WAY MMDS LICENSES IN 45 MAJOR MARKETS

Services Area Covers Nearly 25 Million Households, Plus Small Businesses

Overland Park, Kansas, August 22, 2000 -- Sprint has filed a series of applications with the Federal Communications Commission (FCC) to offer fixed wireless broadband service in 45 markets across the United States, building on its Sprint Broadband Direct (sm) service now available in Tucson and Phoenix, AZ.

The new market applications include: Chicago, Ill.; San Francisco, San Jose, Fresno and Eureka, Calif.; Milwaukee, Green Bay and Fon du Lac, Wisc.; Lansing, Mich.; Las Vegas, Nev.; Salt Lake City, Utah; Boise, Idaho; Cincinnati, Columbus, and Toledo, Ohio; St. Louis, Mo.; Indianapolis and Bloomington, Ind.; Seattle, Wash.; Nashville, Tenn.; Omaha, Neb.; and Denver, Colorado Springs, Ft. Collins and Greeley, CO.

Some applications were filed with the FCC during a window of opportunity last week and others were filed prior to that in July and August. In addition to existing service in Tucson and Phoenix, Sprint already holds licenses to provide two-way fixed wireless broadband service in Detroit, Houston, Colorado Springs, San Jose, and San Francisco. The filings give Sprint access to 24.8 million of the estimated 30 million households covered by its licenses.

"With these filings, Sprint becomes 'spectrum-ready' to continue our aggressive roll-out of markets for the balance of this year and in 2001," said Tim Sutton, president of Sprint's Broadband Wireless Group. "Not only are we prepared to move into 45 additional markets, but we will have enough spectrum to deliver service to our first 2 million customers."

In six of the markets for which two way licenses were filed, Sprint is seeking to build a cellular system that will allow the company to serve many more customers than a single "super cell" design.

"Cellurization will enable us to increase coverage and capacity in our larger markets," Sutton said. "Over time, it will enable us to serve customers that do not even have a "line of sight" to one of our towers, making Sprint Broadband Direct available to even more people." Fixed wireless service uses a small stationary digital transceiver at the home or business to receive wireless high speed Internet service from a fixed tower location that serves a wide area.

Sprint Broadband Direct users now commonly experience download speeds of about one million bits per second (1 Mbps), bursting up to five millions bits of data per second (5 Mbps). In comparison, a standard telephone modem connects typically at less than 56,000 bits per second (56 Kbps). Sprint offers the service to households for \$39.95 a month in current markets.

The license applications for each market seek to change the use of spectrum originally set aside for one-way video transmissions to allow for two-way fast Internet service, and are expected to be granted. The service is called Multi-channel, Multi-point Distribution Service or MMDS, and includes wireless frequencies

in the 2150-2162 MHz and 2500-2690 MHz spectrum bands.

"We are very encouraged by the spirit of cooperation demonstrated by fixed wireless operators throughout the industry," said Todd Rowley, vice president of Spectrum Management for Sprint BWG. "The filing process required significant technical coordination between neighboring systems. Sprint obtained over 1,000 consent letters from other operators. With this level of cooperation, I am convinced that fixed wireless systems will continue to be successfully licensed and developed."

Sprint expects the next filing window to open in February or March 2001. At that time, the company plans to file in additional markets, to seek new cellular applications and to file to use additional spectrum, which will increase each market's capacity.

Sprint is a global communications company – at the forefront of integrating long distance, local and wireless communications services, and a large carrier of Internet traffic. Sprint built and operates the United States' first nationwide all-digital, fiber-optic network and is a leader in advanced data communications services. Sprint has \$20 billion in annual revenues and serves more than 20 million business and residential customers.

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### Contact:

Robert Hoskins, 602-455-6046 E-Mail: robert.k.hoskins@mail.sprint.com

For Immediate Release

### SPRINT LAUNCHES FIRST BROADBAND WIRELESS MARKET IN PHOENIX

The New Sprint Broadband Direct (sm) Service Delivers High-Speed, Broadband Service to 85% of the Greater Phoenix Area

PHOENIX, May 8, 2000 -- Sprint (NYSE: FON) today announced the launch of its first broadband wireless market in Phoenix, Arizona. The new product, called Sprint Broadband Direct SM, represents a truly revolutionary method of providing two-way, high-speed access to the Internet, using fixed wireless technology and featuring the EarthLink Sprint Internet service.

As of today, over 85% of the homes and offices in the Phoenix metroplex can subscribe to Sprint Broadband Direct's high-speed service for just \$39.95 per month. The service provides multimegabit download speeds and does not require a second phone line to hook up a computer to the Internet. The connection is "always on" when the customer is ready to surf the World Wide Web – no more dialing into a modem bank multiple times to get a good connection and no more getting bumped off-line during an important work session. And, since the technology is wireless, customers will not have to wait months or years for their local telephone or cable company to upgrade their neighborhood's wiring with two-way capabilities.

Now customers have an attractive third option for combined local broadband access and Internet Service Provider (ISP) service. Sprint Broadband Direct will provide downstream burst rates of up to 5 Megabits per second (Mbps), and commonly experience download speeds of up to 1-2 Mbps.

"For years, many people have been wanting a really high-speed connection to the Internet. While many cable and DSL providers have been promising broadband service for some time now, many consumers still don't have a broadband choice in their neighborhood," said Tim Sutton, president of Sprint's Broadband Wireless Group. "Since our service doesn't depend on wires, we can move quickly into a market and provide coverage to most of the households and businesses right away. We intend to end what we characterize as 'Broadband Envy'.

"The strategy behind BWG's deployment of MMDS technology is to develop, implement and manage the fastest, most reliable wireless network possible," Sutton continued. "We want to rapidly roll out two-way, high-speed Internet access for the masses and, in the future, add Voice over Internet Protocol (VoIP) services and to set the stage for the rapid deployment of the Sprint IONsm, Integrated On Demand, product line."

In addition to its widespread local availability and broadband speeds, Sprint Broadband Direct has several advantages over other broadband services. Sprint's fixed wireless network is more secure than cable modems due to the routed and wireless nature of its network architecture. Wired cable modem networks are typically bridged, not routed, which allows users, and potential hackers, to access all packets that are broadcast on a given network segment.

Sprint Broadband Direct also delivers a service that is not distance sensitive like Digital Subscriber Line (DSL). With DSL service, the further away a customer is from the local telephone company's central office that serves their neighborhood, the more

downloading and uploading speeds decrease. As a result, customers across multiple neighborhoods may experience different levels of throughput. Sprint's fixed wireless service delivers the same throughput to customers regardless of how close they are to the transmission site. In addition, since many DSL providers lease the majority of their network from the local telephone company, they do not have total control of their entire network, which can cause a number of network management and provisioning issues. Sprint owns its entire broadband network and manages its traffic for optimum performance 24 hours a day, 7 days a week.

How does it work?

Sprint Broadband Direct is based on an innovative technology called fixed wireless. Unlike mobile wireless, fixed wireless uses a stationary digital transceiver at the home or business receiving the service. The transceiver is pointed toward a radio transmission tower to send and receive a signal. The digital transceiver is a small, 13.5" x 13.5" diamond-shaped device, which is less than half the size of the common Direct Broadcast Satellite TV dish. The radio transmission tower can send and receive high-speed Internet data to customers that are up to 35 miles away, making it the perfect service for nearly all customers in a metropolitan area, including suburban and rural areas that are too far away from the city to receive other broadband services. Service also will be available to inner city neighborhoods that have been excluded by other wired broadband providers.

Sprint Broadband Direct Features:

Available to 85% of homes in the metropolitan Phoenix area

Downstream burst rates up to 5 Mbps

Typical downstream rates up to 1-2 Mbps

"Always-on" connection

Connectivity for one computer (more can be supported for an additional charge)

Customer service and network management 24 hours a day, 7 days a week

Internet services provided by EarthLink Sprint

Six e-mail accounts

- Six personal start pages

- Six megabytes of Web storage for building personal Web pages
- Five hours per month of remote dialup Internet access for use when away from Sprint Broadband Direct coverage area

Sprint Broadband Direct Benefits:

☐ More secure than other broadband networks
☐ Service is not distance sensitive
☐ No more waiting for a wired broadband connection
☐ No more waiting for a dialup modem to connect
☐ No need for a second phone line to hook a computer to the Internet
☐ No more long wait times for large graphics and Web pages to download
☐ No more missed phone calls. Since this technology is wireless, your phone is dedicated to being what you need it to be − a phone.

Where is Sprint Broadband Direct available today?

Sprint Broadband Direct is available to anyone in the greater Phoenix metroplex within 35 miles of South Mountain or Shaw Butte that has line of sight to the Sprint Broadband Direct transmission tower. This represents about 85% of the Phoenix area.

In addition, Sprint and WorldCom have announced a merger agreement, which the companies expect to close in the second half of 2000. By late 2001, a merged Sprint and WorldCom would offer broadband fixed wireless service to customers in more than 100 cities and would have the potential to reach approximately 60% of the households in the United States. The combination of Sprint and WorldCom wireless assets and technical resources would allow accelerated deployment of these broadband services to rural areas and markets traditionally under-served by the local phone and cable monopolies.

### Pricing/Demos

Sprint Broadband Direct is available for both business and residential customers. The service will be sold through Sprint's toll-free telephone number at (888) 996-0001, through BestBuy

and other national computer /consumer electronics retail outlets and online via Sprint's Web site at www.sprintbroadband.com. Demos of the Sprint Broadband Direct product are available at selected BestBuy and other retailers throughout the Phoenix metroplex. Check Sprint's Web site for a list of locations.

Residential Product

Sprint Broadband Direct

Burst Rate Up to 5 Mbps

Downstream Up to 1-2 Mbps

Upstream Up to 256 Kbps

Price \$39.95

**Business Product\*** 

Sprint Broadband Direct Office

Burst Rate Up to 5 Mbps

Downstream Up to 1-2 Mbps

Upstream Up to 256 Kbps

Price \$89.95

\*The standard business product supports 5 IP addresses; more can be added at an additional charge.

There will be a one-time equipment charge that varies by the type of service agreement the customer signs. Customers who sign a two-year agreement will receive equipment for \$99; a one-year agreement will be \$199 and month-to-month customers will pay \$299. In addition to equipment, there is a \$299 professional installation charge. For a limited time, however, Sprint is waiving the installation fee for customers in the Phoenix metropolitan area.

In addition to broadband wireless connections, Sprint Broadband Direct also provides a full suite of ISP services including software, email, a personal start page, personal Web space and 24x7 customer support. Soon, a full suite of enhanced Web hosting services will be introduced. More information on the Sprint BWG's products is available at www.sprintbroadband.com.

**About Sprint** 

Sprint is a global communications company - at the forefront of integrating long-distance, local and wireless communications services, and a large carrier of Internet traffic. Sprint built and operates the United States' first nationwide all-digital, fiber-optic network and is a leader in advanced data communications services. Sprint has \$20 billion in annual revenues and serves more than 20 million business and residential customers.

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WANT EROADBAND INTERNET SERVICE? CLICK HERE Nucentrix Files for FCC Approval to Launch Broadband Fixed-Wireless Services

8/21/2000, Plano, TX

Nucentrix Broadband Networks, Inc. (NASDAQ: NCNX), today announced that it has filed applications with the Federal Communications Commission (FCC) for authorization to use its spectrum to provide broadband fixed-wireless services in 70 markets across Texas and the midwestern United States. The filing took place in the FCC's initial filing window of August 14-18, 2000. This was the first opportunity for operators of Multichannel Multipoint Distribution Service (MMDS) and Instructional Television Fixed Service (ITFS) radio frequencies to file for licenses to provide two-way communications services. "We have passed another critical phase in our plan to roll out reliable high-speed Internet access and other broadband services to businesses and residential consumers in our markets," said Carroll McHenry, Chairman and CEO of Nucentrix. "Our pre-launch team is in full swing as we prepare to deploy our networks. Soon we will be able to show our customers how broadband connectivity can revolutionize the way they conduct business and use the Internet at home. We also look forward to working with our ITFS partners to bring them cuttingedge broadband access solutions as we continue to help bridge the 'digital divide' in the medium and small markets that we serve.

The recent filing window represents the culmination of the combined efforts of the MMDS/ITFS industry and the FCC to facilitate the use of this spectrum for a wide range of enhanced digital and two-way communications services. Under the FCC's new streamlined licensing process, operators will have 60 days after filing to modify their applications to resolve any conflicts with neighboring systems. After that, if no petitions to deny an application are filed during a second 60-day period, the application automatically will be considered granted.

Nucentrix recently announced the successful completion of an initial technology trial with Cisco Systems in Austin, Texas. The company expects to complete a second trial in Amarillo, Texas by October 2000. Following regulatory authorization for its applications, Nucentrix plans to launch fixed-wireless broadband services in at least 20 markets by the end of 2001.

**About Nucentrix** 

Nucentrix Broadband Networks, Inc. provides broadband

wireless network and subscription television services using up to 196 MHz of radio spectrum in the 2.1 GHz and 2.5 - 2.7 GHz range, commonly referred to as Multichannel Multipoint Distribution Service (MMDS) and Instructional Television Fixed Service (ITFS). Nucentrix Internet Services, Inc., a wholly owned subsidiary, operates high-speed Internet access businesses under temporary developmental FCC licenses in Austin and Sherman-Denison, Texas. Nucentrix currently holds broadband wireless spectrum rights in 94 medium and small markets across Texas and the midwestern United States, including four markets which Nucentrix has agreed to purchase under a definitive agreement or letter of intent, each of which is subject to customary closing conditions.

### ###

This media release contains forward-looking statements regarding the business and operations of Nucentrix. These statements are identified by words such as "will," "prepare," "expects," "plans" and other words referring to events to occur in the future. These statements involve risks and uncertainties that may cause actual results and developments to differ materially from the statements in this media release, including failing to obtain necessary regulatory approvals (including the two-way authorizations mentioned in this media release), deploy services based on the company's currently-anticipated technology platform and finalize pending transactions. Other risks and uncertainties regarding Nucentrix, the industries in which it operates and the implementation of its business strategy are described in Nucentrix's Form 10-Q filed August 11, 2000, Form 10-Q filed May 9, 2000, Form 10-K filed March 30, 2000 (as amended by Form 10-K/A) and other SEC reports of Nucentrix filed after April 1, 1999. Nucentrix undertakes no obligation to update any forward-looking statements made in this media release.

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### WELCOME TO NUCENTRIX

WELCOME to Nucentrix Broadband Networks. Nucentrix is a provider of broadband Internet and broadcast video services using wireless spectrum licensed by the Federal Communications Commission. This spectrum, known as Multichannel Multipoint Distribution Services (MMDS), enables the rapid delivery of broadband services in a highly reliable, secure and scaleable fashion. Click here for a more thorough presentation of our business.

Today, Nucentrix Broadband Networks operates two independent businesses. The first, Nucentrix Internet Services, operates as an Internet Service Provider (ISP) in several markets in Texas. The second business, Heartland Television, offers comprehensive television programming services in 58 communities throughout the United States.

It is our intent at Nucentrix to become the leading provider of broadband services in the markets we serve. We will achieve this aim by combining the superior technical advantages of broadband wireless technology with the first-class talents of our people. Please feel free to return to this site to see the latest at Nucentrix.

Carroll D. McHenry Chairman & CEO

### NUCENTRIX NEWS

Nucentrix Broadband Networks Reports Financial Results For Its Quarter Ended June 30, 2000 8/1/2000-Plano, TX-Nucentrix Broadband Networks, Inc. (NASDAQ: NCNX), a provider of broadband wireless services in medium and small markets, today announced financial results for its second quarter ended June 30, 2000.(more)



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NEWS

### CORPORATE OVERVIEW

We provide wireless broadband Internet and wireless subscription television services using up to 196 MHz of radio spectrum licensed by the FCC in the 2.1 GHz and 2.5 - 2.7 GHz range, primarily in medium and small markets in the central United States. This spectrum commonly is referred to together as "Multichannel Multipoint Distribution Service," or "MMDS." We own the basic trading area (BTA) authorization, or otherwise license or lease MMDS spectrum, in 93 markets covering an estimated 9.1 million total households, including three markets covering an estimated 460,000 total households for which we have entered into letters of intent to acquire.

Our business strategy is to become a leading provider of wireless broadband services using our high-capacity radio spectrum in medium and small markets. Our service offerings include Internet access from 256 Kbps to 1.54 Mbps, or up to 50 times faster than service provided over standard telephone lines. Through a national independent contractor, we also provide value-added services such as technical support, e-mail, Web hosting and design, domain name registration and domain name and maintenance changes. We launched our first Internet market, Sherman-Denison, Texas, in February 1999 followed by our second market, Austin, Texas, in May 1999.

In February 2000, we announced a strategic alliance and agreement with Cisco Systems, Inc. to pursue testing and deployment of wireless broadband services using VOFDM technology on a Cisco Powered Network". The agreement includes two field trials to be completed in Austin and Amarillo, Texas between September 2000 and the end of 2000. We expect to launch at least 20 total markets by the end of 2001 using this technology.

Historically, we have used our spectrum to provide wireless subscription television services. We presently have wireless subscription television transmission facilities constructed and operating in 58 markets in nine states. At April 30, 2000, we had about 125,000 wireless subscription television customers, including about 117,000 customers who subscribed only to programming service provided over our MMDS spectrum, and 8,000 "combo" subscribers who subscribed to both our MMDS programming service and to DIRECTV programming service sold by us. In addition, at April 30, 2000, there were approximately 17,000 customers who received only DIRECTV programming sold by us.

Cisco Systems and Cisco Powered Network are trademarks of

Cisco Systems, Inc. DIRECTV is a registered trademark of DIRECTV, Inc., a subsidiary of the Hughes Electronics unit of General Motors Corporation.



### NUCENTRIX INTERNET SERVICES LINCENTRIX SPECTRUM



### BRODUCTS AND SERVICES

SPRVICES

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USE

WANT BROACEAND WILEPNET SERVICEY CLICK HERE Nucentrix offers a variety of service packages\* to meet your requirements.

Our basic wireless access plans are designed for single user customers.

Features	Plan 1: 256/56 (Kb/s)	Plan 2: 384/128 (Kb/s)
Web Access	Yes	Yes
POP email accounts	5	5
News server access	Yes	Yes
IP Addresses	1	1
Optional email account	\$2.95/mo.	\$2.95/mo.
Alias email account	\$2.95/mo.	\$2.95/mo.
Maximum monthly upstream data transfer	5GB	5GB

Speeds shown are minimum rates for downstream and upstream data.

Our business wireless access plans are designed for businesses and telecommuters operating a LAN, either at home or in a commercial environment.

Features	Plan 1: 1,500- 384 (Kb/s)	Plan 2: 1,500- 384 (Kb/s)	Plan 3: 256/256 (Kb/s)	Plan 4: 384/384 (Kb/s)
Web Access	Yes	Yes	Yes	Yes
POP email accounts	10	40	10	10
Optional email account	\$2.95/mo.	\$2.95/mo.	\$2.95/mo.	\$2.95/mo.
Alias email account	\$2.95/mo.	\$2.95/mo.	\$2.95/mo.	\$2.95/mo.
News server				

access	Yes	Yes	Yes	Yes
IP Addresses	5	20	5	5
Optional DNS	Yes	Yes	Yes	Yes
Optional Web Hosting	Yes	Yes	Yes	Yes
Optional Secure Hosting	Yes	Yes	Yes	Yes
Optional Domain Name Registration	Yes	Yes	Yes	Yes
24/7 Support	Yes	Yes	Yes	Yes
Maximum monthly upstream data transfer	5GB	5GB	5GB	5GB

Speeds shown are minimum rates for downstream and upstream data.

Please call us at 1-877-NUCENTRIX for our latest pricing and service plan information.

Back to Products and Services

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<sup>\*</sup> Installation charge applies. Requires annual contract. Early termination charges apply. Service is not available in all areas. Monthly rates vary by service area.



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### PRODUCTS AND SERVICES

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### HARDWARE PRODUCTS

Nucentrix currently uses wireless routers and network equipment from Hybrid Technologies. Hybrid is a market leader in advanced wireless data communications technology. Below are lists of the specific customer premise equipment (CPE) routers Nucentrix offers, and technical specifications on Hybrid products.

### Single Workstation Router

N231 Router for the SOHO, Telecommuter or resident user

### Multi-Workstation Router (LAN)

CCM231 Router for the office LAN

### Wireless Broadband Data Access System

System Features

Robust, Efficient Downstream Delivery

- RF Modulation: 64QAM
- Frequency Range: 54 to 806 MHz
- Receive Capture Range: +/- 80KHz
- Receive Tracking Range: +/- 100 KHz additional
- Operating Range: -20 dBmV to +10 dBmV
- Required S/N: >= 25dB for 1x10<sup>-9</sup> BER after FEC
- Three 10 Mbps subchannels, 9Mbps payload after FEC
- Aggregate of 27 Mbps in a 6 MHz channel
- Distance-independent
- Robust multipath and noise-tolerant subchannels

### Variable Speeds Upstream

- RF Modulation: Burst Mode QPSK
- Frequency Range: 5 to 42 MHz, remotely controlled
- Receiver Operating Range: -16 dBmV to +14 dBmV, 1 dB steps at 256 Kbps (bit rate dependant)
- Modulator Output Range: +8 dBmV to +55 dBmV, 1dB

steps

- Selectable upstream speed from 256 Kbps to 5.12 Mbps
- Required S/N: >= 13 dB for 1x10<sup>-9</sup> BER after FEC

### Router Return

Router-return: Synchronous return relevant to downstream path

### Scalable System Architecture<sup>1</sup>

- Decoupled downstream and upstream data paths
- Flexible return paths and speeds
- One 6 MHz downstream channel can support from 1200 to 1800 active users.
   This translates into 12,000 to 18,000 subscribers
- CMG-2000: services 5,000 subscribers, grows to 20,000
- CMD-2000: services 3,600 active users, 18,000 subscribers, two TV channels1
- CMU-2000-14C: 1400 subscribers1

### Client-Server Reliability and Support

- Client/server architecture
- Support for PC, Unix workstation or Macintosh
- Multi-client support, service 1 to 20 active users per cable modem1
- Automatic software upgrade to all units
- Protocols: IP, TCP, UDP, ARP, ICMP, PPP, SLIP, CSLIP, CHAP, PAP

1 The number of active users and active cable modems is highly variable and dependent on service scenarios, applications being used, etc. In general, there are 10 times as many subscribers as active users. The actual ratio of subscribers to active users will vary. Some ISPs use ratios of 20 or 30, increasing the capacity of the CMU proportionally.

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### · NUCENTRIX SPECTRUM



### OVERVIEW



Nucentrix Broadband Networks, Inc. is a provider of wireless broadband network services in medium and small markets in the central United States. Nucentrix controls up to 200 MHz of MMDS spectrum (FCC licensed radio spectrum in the 2.1 GHz to 2.7 GHZ range) which passes 7.2 million line of sight households in approximately 87 markets, and controls the rights to 20 MHz of WCS spectrum (FCC licensed radio spectrum at approximately 2.3 GHz) in 19 of its markets.

Historically, this MMDS spectrum has been used by Nucentrix to provide wireless multichannel television service in 58 of its markets in eight states. Going forward, the company expects to provide wireless broadband internet services in many of its existing markets while expanding, through consolidation of other MMDS spectrum licenses, into additional medium sized markets across the United States.

The Nucentrix mission is to facilitate the provision of wireless broadband IP (internet protocol) services to at least the markets below the top 30 BTA's (Basic Trading Areas). The company believes MMDS spectrum is ideally suited for providing wireless broadband IP services to medium size markets.

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### <!--StartFragment-->PART I

In this Annual Report on Form 10-K, we will refer to Nucentrix Broadband Networks, Inc., a Delaware corporation, as "Nucentrix," "we," "us" and "our."

### ITEM 1. BUSINESS

We use our high-capacity radio spectrum to provide fixed wireless broadband services in medium and small markets in the central United States. We control up to 196 MHz of radio spectrum in the 2.1 and 2.5-2.7 GHz band licensed by the Federal Communications Commission ("FCC") in 92 markets (including two markets for which we have signed a letter of intent to acquire). This spectrum band is commonly referred to as Multichannel Multipoint Distribution Service, or "MMDS." We currently provide always-on, high- speed wireless Internet access service under temporary developmental FCC licenses in two markets, primarily to medium-sized and small businesses, small offices/home offices ("SOHOS") and telecommuters. We began providing two-way wireless broadband Internet access in Sherman-Denison, Texas, in February 1999 and in Austin, Texas, in May 1999.

In February 2000, we announced a strategic alliance and agreement with Cisco Systems, Inc. ("Cisco"), to pursue testing and deployment of fixed-wireless broadband services using VOFDM technology on a Cisco Powered Network(R). The agreement includes two field trials to be completed in Austin and Amarillo, Texas between September 2000 and the end

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of 2000. We expect to launch at least 20 total markets using VOFDM technology by the end of 2001. We believe that a VOFDM-based technology platform will allow us to maximize our coverage for two-way services in our markets, which should allow us to offer these services to more subscribers than possible through other fixed-wireless technologies currently available. We also expect that a VOFDM technology platform will allow us to provide a higher quality of service to our end users by decreasing the effects of multipath fading or narrowband interference that can exist in wireless operating environments.

Historically, we have used our spectrum to provide wireless subscription television programming, commonly referred to as "wireless cable." We presently have wireless television transmission facilities constructed and operating in 58 markets in nine states. At February 29, 2000, we had about 130,100 wireless cable subscribers, including about 8,300 "combo" subscribers who also subscribed to DIRECTV(R) programming sold by us. In addition, at February 29, 2000, we serviced and received commissions on about 13,900 subscribers who only received DIRECTV programming. Going forward, our goal is to become a leading provider of wireless broadband services in our markets, and we expect the number of our wireless cable television subscribers to continue to decline as we allocate more of our spectrum to wireless broadband access and other wireless broadband services. We also may explore acquisitions of, and strategic alliances with, other providers of Internet access, broadband and telephony services, such as traditional Internet service providers ("ISPs"), digital subscriber line ("DSL") providers, other fixed or mobile wireless providers in licensed or unlicensed frequencies and Competitive Local Exchange Carriers ("CLECs").

We use our spectrum to transmit and receive signals between a base station and transmit/receive equipment at each customer's location. Our radio spectrum is comprised of the following channels:

o MDS (Multipoint Distribution Service) -- 2 channels in the 2150-2160 MHz band and 3 channels in the 2650-2680 MHz band,

- o ITFS (Instructional Television Fixed Service) -- 20 channels in the 2500-2686 MHz band,
- o MMDS (Multichannel Multipoint Distribution Service) -- 8 channels in the 2596-2644 MHz band, and
- o Leased rights to 20 MHz of WCS (Wireless Communications Service) spectrum at 2.3 GHz in 19 markets.

We often collectively refer to the spectrum in the 2.1 and 2.5-2.7 GHz bands as "MMDS" in this document.

We believe that our MMDS spectrum will be able to transmit and receive data at effective data rates of up to 22 Mbps downstream and 19 Mbps upstream per six-MHz channel, and can cover a service area radius of up to 35 miles from a single base station.

Nucentrix was incorporated under the laws of the State of Delaware in October 1993 under the name Heartland Wireless Communications, Inc. Nucentrix emerged from a reorganization under Chapter 11 of the U.S. Bankruptcy Code on April 1, 1999, and we changed our name on that date to Nucentrix Broadband Networks, Inc. See "Reorganization." Our executive offices are located at 200 Chisholm Place, Suite 200, Plano, Texas 75075, and our telephone number is (972) 423-9494.

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### HISTORY

U.S. Interactive, L.L.C. d/b/a **AccelerNet** was formed for the purpose of delivering asymmetrical wireless high speed Internet access to SOHOs (small office/home office), corporate telecommuters, and small to intermediate size businesses in major metropolitan areas in the US. **AccelerNet** has initiated its service by utilizing the transmitting facilities of its Low Power Television (LPTV) station KHLM (Channel 43) in Houston, TX. **AccelerNet** has been approved for \$15 million in initial funding for operations through a private placement by a major institutional investor.

AccelerNet is positioned to provide superior, high speed Internet access at rates that represent a significant value in comparison to traditional "hard wired" high-speed solutions. Unlike most Internet Service Providers (ISPs), AccelerNet transmits downstream information through the air via compressed and encoded advanced UHF frequency spectrum. This enables AccelerNet to reach a user's computer over a robust, high quality, digital signal. Not only is the signal digital, but the downstream broadcast data rate is over 350 times faster than standard telephone-based modems. Even ISDN at 128 Kbps or T1 at 1.54 Mbps cannot keep up with AccelerNet. AccelerNet's digital data downstream broadcast speed is an incredible 10 Mbps - 10 million bits per second. AccelerNet is by far the most efficient and economical source available to businesses for accessing information today.

AccelerNet has acquired LPTV stations in Tampa and Jacksonville; has entered into purchase agreements for stations in Denver and Phoenix; and holds options for ten additional cites including Honolulu, Las Vegas, Oklahoma City, Tulsa, Little Rock, Memphis, Nashville, Birmingham, Rochester and Syracuse. Although AccelerNet's core business is asymmetrical wireless Internet access, the company has entered into several strategic partnerships that will allow for an expanded offering of Internet access products and services. Services now include high bandwidth, "wired" internet access, as well as, provisioning of virtual private networks and corporate intranets, web design and hosting, e-mail serving, DNS services and E-commerce applications.

Corporate national headquarters for **AccelerNet** are located at 1770 St. James Place, Suite 120, Houston, TX, 77056 (713.963.9963). The President and CEO for the company is Dean M. Mosely who has extensive experience in the telecommunications industry including having an ownership interest in a cellular telephone company which he developed and managed from inception.

AccelerNet operates its Network Operating Center (NOC), which includes a full service Internet point of presence (PoP), at 2 Shell Plaza in downtown Houston with transmission facilities located in east Houston. A DS3 providing up to 45 mbps throughput directly connects AccelerNet's NOC to Cable and Wireless' dual OC48 backbone, bypassing any third party carrier and reducing the risk of network failure. The core wireless service is facilitated through equipment that is manufactured by Hybrid Networks, Inc. of

### PRICING

Untitled

### COMMERCIAL PRICE LIST

DOWNSTREAM BANDWIDTH Analog Return Upstream Monthly Access Rates

256Kbps \$159.99

512Kbps \$199.99

832Kbps

## Hardware and Installation Requirements

Option 1: One year service contract: One time cost of \$1050 (\$850 single user)

Option 2: 24 month service and lease contracts: \$299 down plus \$32/month lease (\$23/month for single user)

Includes option to buy equipment at end of term for \$300

Proxy server required for 20 users or more. (Call for price)

Monthly Access Rates

DOWNSTREAM BANDWIDTH 1Mbps **ISDN Return Upstream** 

> 256Kbps \$259.99

512Kbps \$329.99

1.54Mbps

Hardware and Installation Requirements

Option 2: 24 month service and lease contracts: \$299 down plus \$36/month Option 1: One year service contract: One time cost of \$1150

Includes option to buy equipment at end of term for \$300

08/29/2000

Proxy server required for 20 users or more. (Call for price)

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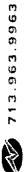
### RESIDENTIAL PRICE LIST

DOWNSTREAM BANDWIDTH Analog Return Upstream Monthly Access Rates 256Kbps \$59.99

# Hardware and Installation Requirements

Option 2: 24 month service and lease contracts: \$299 down plus \$23/month. Option 1: One year service contract: One time cost of \$850 Includes option to buy equipment at end of term for \$300

BACK



08/29/2000

## http://www.accelemet.net/services/analysis.html

### ANALYSIS COMPETITIVE

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# - Wireless Service

## **Typical Wired T-1 Service**

Transport Media: Traditional hard wired T-1 line	
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reless T-1 with an ISDN return	
: Wir	
Media	
Transport I	

Bandwidth: Clear channel full duplex T-1 line with 1.544Mbps total aggregate bandwidth Bandwidth: 1.544Mbps downstream with 128Kbps

upstream

Monthly ISP cost: \$259.95 to \$499.95\*\*

Monthly ISP Charge: \$1100.00 to \$1500.00

Local loop \* charge for T-1 line access: \$350.00 to \$1000.00 PLUS Local loop\* charge for ISDN line access: \$40.00 to PLUS

Total Monthly Charges: \$1450.00 to \$2500.00 Total Monthly Charges: \$289.00 to \$574.99

Total Equipment & Installation Charges: \$4600.00 to \$8500.00 Total Equipment & Installation Charges: \$1147.00 to \$1897.00

\*Estimated based on mileage \*\*Proxy server required for 20 users or more

## **Typical Wired ISDN Service**

Mineral Market Williams Service

Transport Media: Traditional hard wired ISDN line Transport Media: Wireless with an analog (POTS) return path

Bandwidth: Two channel dedicated ISDN line with 128Kbps total aggregate bandwidth Bandwidth: 256Kbps (twice the speed of a traditional downstream with 14 4Kbps to 56Kbps upstream hard wired 2-channel dedicated ISDN line)

Monthly ISP cost: \$59.99 to \$299.98\*

Monthly ISP Charge: \$249.95 to \$399.00

PLUS

Local loop \* charge for ISDN line access: \$40.00 to

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08/29/2000

Total Monthly Charges: \$289.95 to \$474.00

\*Estimated based on mileage \*\*Proxy server required for 20 users or more

Total Monthly Charges: \$59.99 to \$299.98

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713.963.9963

