

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

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JUN 23 1997

In the Matter of)
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Amendment of Part 1 of the)
Commission's Rules --)
Competitive Bidding Proceeding)

Federal Communications Commission
Office of Secretary
WT Docket No. 97-82

COMMENTS OF THE
NATIONAL TELEPHONE COOPERATIVE ASSOCIATION

The National Telephone Cooperative Association ("NTCA") submits these comments to the Public Notice ("NOTICE"), in the above proceeding, DA 97-679, released June 2, 1997.

NTCA is a national association of approximately 500 local exchange carriers ("LECs"). NTCA members are typically small carriers that serve no more than 50,000 access lines. All of NTCA's members meet the definition of a "rural telephone company" under the Commission's existing competitive bidding rules. Those companies were therefore eligible to participate in the C and F block auctions that were created to fulfill the mandate to create opportunities for rural telephone companies and other designated entities. Seventy-three NTCA members bid on the C block licenses as individuals or in combination with others. Of that number, 31 NTCA members were winning bidders, either alone or in combination with others bidders in the C Block auctions. NTCA members also participated in and obtained licenses for the F Block. C block losing bidders among NTCA members, like many small companies, believe they were excluded during

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the auctions by inflated bid prices made possible by Commission rules that permitted large entities to own as much as 75% of a bidder's equity.¹

DISCUSSION

The Commission requests comments on several letters that variously ask that it modify the payment frequency for broadband PCS C and F block licenses from quarterly to annual installments, suspend installment payments until year five of the license term, extend the license term to 20 years, modify C block control group rules, allow transfer of C block licenses before the expiration of the five year holding period with modified unjust enrichment payments, reduce the principal amount of debt from an average C block price of \$40/pop to \$15/pop. Additionally, numerous parties have requested refunds in connection with timely payments made prior to the Bureau's March 31 Order suspending the payment of C block installments. The Commission also requests comment on a Petition for Rulemaking by Cook Inlet Region, Inc. Cook requests that the Commission lift the March 31 stay and initiate a rulemaking to establish general requirements and procedures for the disposition of the installment payment obligations.

Section 309(j) (3) and (4) of the Communications Act require that the Commission balance the public's interest in use of the spectrum and in recovery of a portion of its value against the requirement that it craft performance requirements to ensure prompt delivery of services to rural areas, prevent stockpiling of the spectrum and promote investment in and rapid deployment of new technologies and services. An unfortunate combination of factors now make it difficult for the Commission to accomplish all these goals in the context of its existing

¹ See, Attachment A, Green, *Launching PCS, A Long Road, A Bright Future*, Rural Telecommunications, (July-August, 1996).

regulations. Despite these difficulties, NTCA believes the Commission's disposition of the various petitions and requests in this matter must be guided by principals of fair competition and the Section 309(j) objectives the Commission is required to consider in prescribing regulations to implement competitive bidding.

One area in which the Commission should immediately apply fairness relates to parties that made timely payments under schedules that were suspended by the March 31 stay. The Commission should immediately refund these parties payments with interest to put all licensees in the C block on an equal footing. Likewise, the Commission should consider applying the same interest rate to all C block licenses even if licenses were granted at different times.

With respect to the conflicting proposals to reauction or permit debt restructure, including the deferral of installments to year five of the license, the Commission should carefully weigh the potential impact of either course before permitting specific waivers or undertaking any wholesale changes. Reauction has the potential to harm defaulting debtors as well as existing performing C block licensees whose licenses may be further devalued by substantially lower prices at reauction. On the other hand, debt restructure, especially on a case by case waiver basis, may reward defaulting debtors and give unfair competitive advantages to some licensees while others that meet debt obligations receive no comparable concessions.

NTCA believes that one of the Commission's primary concerns should be to ensure that licensees that have met or intend to continue to meet their obligations are not harmed by changed rules or waivers. In that context, the Commission must look beyond the individual waiver requests before making any significant changes to the rules that are in place. For that reason, NTCA supports Cook Inlet's request for a rulemaking to establish the regulations that will

govern the payment process in the event that a licensee is unable to meet its obligations. NTCA commends the Commission for scheduling a June 30, 1997 forum to discuss the issues of C and F block restructuring and the current capital markets for financing these licenses. In addition to a forum, however, a rulemaking is required to establish certainty, give adequate notice to the public and ensure the public that the Commission is not engaging in ad hoc regulation of this problem. NTCA also agrees with Cook's observation (citing Chairman Reed E. Hundt's March 13 statement to the Subcommittee on Commerce of the U.S. House of Representatives) that a rulemaking will give the Commission an opportunity to resolve the "tension created by the FCC's present dual role as regulator of and creditor to the wireless industry."

The Commission should not delay the initiation of a proceeding. The success of the C license holders hinges on their ability to proceed rapidly. The public will benefit from a quick and fair resolution of the uncertainties associated with installment payments.

CONCLUSION

For the above stated reasons, NTCA urges the Commission to carefully consider what adverse impacts might occur to the public and other licensees from a grant of specific waivers.

In addition, the Commission should immediately place all licensees on an equal footing by refunding timely payments made prior to the March 31 stay and establishing equalized interest rates for all C block licensees.

Respectfully submitted,

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June 23, 1997

LAUNCHING PCS A LONG ROAD, A BRIGHT FUTURE

RECENT ARTICLES ON PCS REFER TO IT AS THE NEXT GENERATION OF wireless service, calling it superior to cellular and better able to compete with wireline. As the rate of wireless customers continues to grow 30 percent a year, according to some estimates, the PCS promise sounds good — among the traits touted are better quality and security than cellular — but thus far, the road to get the service to customers has proven anything but smooth. Rules for the C-Block auction seemed to change regularly, and licenses originally expected to sell for less than \$10 a POP [per potential customer] ended up as costly as \$30 a POP in some markets. And now that the auctions have ended, winning bidders face further hurdles, such as how to finance build-out, clear incumbents from the spectrum, and compete with existing cellular providers.

The Federal Communications Commission (FCC) billed the C and F blocks as “entrepreneur,” intended to give so-called designated entities — rural telephone companies, small businesses, and entities owned by women and minorities — a chance to get into the PCS game along with big players, such as AT&T and PCS PrimeCo, which dominated earlier auctions for licenses in blocks A and B. Things don’t always work out as planned, however. Many say that the “little guys” the FCC tried to include in the spectrum game came up short. Why? Big companies used loopholes and revamped laws and rules to get into the C-Block auction and accessed bidding credits and other perks Congress intended for designated entities. •••►

BY MATTHEW W. GREEN JR.

When the rules changed so that large players could back smaller players, a lot of money came into the auction that wouldn't have otherwise been there. Some folks were backed by such companies as Sony and General Electric. There was a tremendous amount of money floating around."

What about NTCA members? How did they fare amid the scuffle for C-Block licenses? Of the 73 NTCA members that banded together with other PCS players to at some point bid on the licenses, 31 were successful, although not necessarily in the markets they had originally hoped to acquire. These companies were part of 19 bidders, representing roughly 21 percent of the total of 89 license winners. What did these companies think about the auction? And what are some

entities whose gross revenues in each of the previous two years did not exceed \$125 million and total assets totaled less than \$500 million.

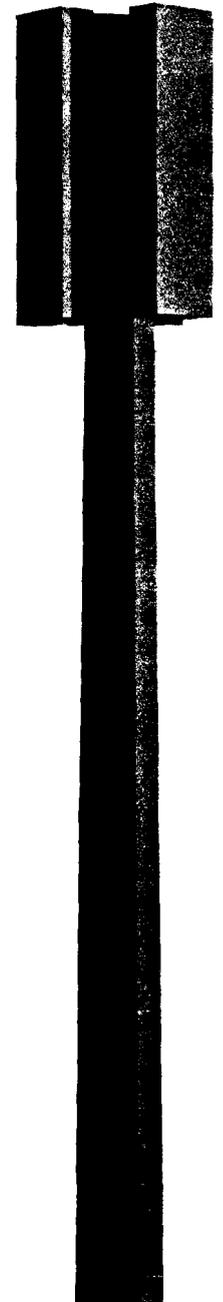
Before the FCC could even begin the C-Block auction, however, the U.S. Supreme Court ruled in *Adarand Constructors, Inc. vs. Peña* that minority preferences in federal programs had to undergo "strict scrutiny." The ruling forced the FCC to take a second look at preferences, such as bidding credits and ownership structures, it had granted to designated entities. According to many small businesses, one of the most damaging changes the FCC made was to allow all C-Block participants to use an ownership/equity structure that permitted a single investor of any size — from a mom-and-pop corner market to a multibillion dollar bank or telecommunications company — to hold up to 49.9 percent of the equity in a PCS venture. In addition, businesses of any size could own as much as 75 percent of a bidder's equity as long as no one of these business owned more than 25 percent of the equity.

of the hurdles they must overcome as they put the bidding behind and embark on the new task of getting their PCS ventures off the ground and beginning service in the areas they've won?

Everyone's Designated

Many NTCA members say that by the time the auction ended, incentives originally intended to give them better leverage in terms of affording spectrum had changed drastically. Larger companies were allowed the same advantages and used them to acquire spectrum in more lucrative markets. According to the FCC, the entrepreneur blocks were intended "to permit smaller businesses to participate in auctions without facing head-to-head competition from very large companies...." The FCC defined a small business as an entity that earned no more than \$40 million in gross revenue in the last three years. It also opened up the C-Block auction to

The changes brought big bucks to the auction table, and shot spectrum prices beyond the reach of small companies. "By the time the courts ruled, the entrepreneur that was supposed to be getting all the benefits didn't end up getting any," says Orlean Smith, Canadian Valley Telephone Company (Crowder, OK) general manager. Canadian Valley is a member of 21st Century Telesis Joint Venture, which won 17 licenses in areas in five states. "We were the guys that



the auction was supposed to be for, and I couldn't afford what the company that won the license in my service area paid for it. I thought it might go for \$4 or \$5 a POP; I think it went for \$20. Considering that companies don't have any infrastructures built yet to carry the service, that's a lot of money."

Other factors also may have contributed to the inflated bid amounts, such as spectrum scarcity and parking. An entity had to bid a certain amount per round to remain eligible to continue in the auction, so in some cases it bid or "parked" money in an area it may not have wanted just to stay in the auction. Of course, by doing this, the company trampled the bid made by the entity leading the pack in that area. Still, most say that big players' bank books served as the fuel for the skyrocketing spectrum prices.

"A whole lot of money from a lot of big players was the single biggest factor in high spectrum prices," says Dan Moffat, a principal with Cathey, Hutton & Associates (Vancouver, WA). Cathey Hutton aided a consortium of 21 small companies bidding on licenses in five BTAs [basic trading areas], but the companies dropped out after being "blown away" by the high spectrum prices. "When the rules changed so that large players could back smaller players, a lot of money came into the auction that wouldn't have otherwise been there. Some folks were backed by such companies as Sony and General Electric. There was a tremendous amount of money floating around."

The Big Build-Out

Despite such obstacles, telcos such as New Paris Telephone (New Paris, IN), which partnered with four other NTCA members and other entities to form Communications Ventures PCS, won almost the entire eastern half of Indiana and areas in Ohio as well. "We had originally intended to acquire BTAs in areas where we served, but those prices quickly climbed out of our reach," says New Paris General Manager Mark Grady. "Rather than just throw our hands up and say, 'Well, that's all we could do,' we sought out other properties of value in the Midwest."

Grady says he foresees bringing PCS to the areas won by Communications Ventures within a year. Several hurdles stand in the way of that goal, however. They include finding money and the technical

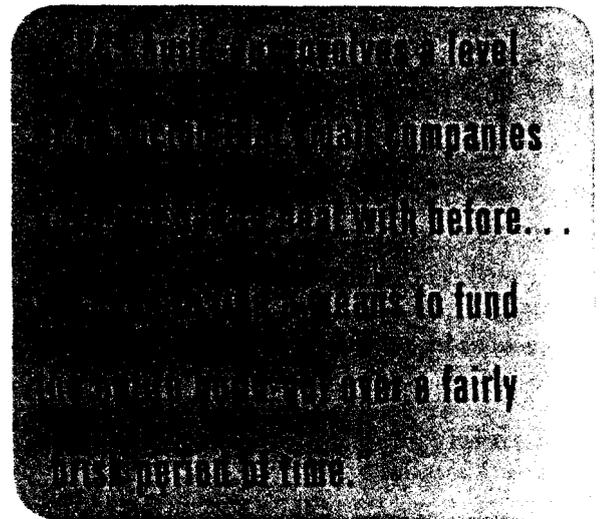
expertise to help build out the systems. "PCS build-out involves a level of financing that small companies have not had to deal with before," says Grady. "In our case, we've got \$24 million committed

to the license itself, plus we need to find a means to fund the entire build-out over a fairly brisk period of time."

Most companies interviewed expect to build out and offer services within a year, a realistic goal according to Moffat. "I think they can expect to build out within a year, but they'll have to market as soon as possible," he says. "Most A and B players will be building, marketing, and operating by the fourth quarter of this year. Rural C players have an advantage, however, because A and B companies are going to the urban areas first for their build-out and marketing. So C players in rural areas can be up in a year and may beat the A and B players in these markets."

Still, setting up shop in rural areas presents additional challenges. Says Smith: "If you didn't win in a big metropolitan area and you plan to serve a rural area, I think the start-up costs are going to eat you alive because the cost of the spectrum was not cheap. When you're paying that much for something with no customers, and you've got to build tower sites, you've got to provide phones to the customers you do acquire, and you've got some potential customers that may already have cellular service. I just don't feel like you're going to get enough customer penetration to turn a profit rapidly."

"Obviously it's a numbers game," says Jimmy Campbell. "The more customers you have, the better off you'll be." As chief operating officer of Central Alabama Partnership, Campbell did all the bidding for his group, which won licenses in Montgomery and Selma. The group is made up of six independent telephone companies, including three NTCA members. "I think if the proper strategies are put in place for build out, turning a profit won't be a problem." •••►



PCS AUCTION RESULTS

The following list shows the 19 winning bidders that include NTCA members as well as the areas they won in the recent auctions for personal communications services (PCS) 30-MHz C-Block spectrum licenses.*

Market license	Population	Net Bid	Price/POP
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Bidder: 21st Century Telesis Joint Venture			
Member: Canadian Valley Telephone Company (Crowder, OK)			
Binghamton, NY	356,645	\$ 6,902,253	\$19.35
Danville, IL	114,241	1,894,256	16.58
Grand Island-Kearney, NE	141,541	4,447,500	31.42
Ithaca, NY	94,097	2,325,003	24.71
Jackson, MS	615,521	18,126,000	29.45
Kokomo-Logansport, IN	184,899	3,926,846	21.24
Lincoln, NE	309,515	7,657,871	24.74
McCook, NE	36,618	671,962	18.35
Marion, IN	109,238	2,374,496	21.74
North Platte, NE	80,249	1,549,346	19.31
Oneonta, NY	107,742	1,954,539	18.14
South Bend-Mishawaka, IN	330,821	13,226,846	39.98
Syracuse, NY	791,140	16,914,000	21.38
Terre Haute, IN	236,968	5,344,596	22.55
Utica-Rome, NY	316,633	6,750,000	21.32
Vincennes-Washington, IN	93,758	480,069	5.12
Watertown, NY	296,253	3,647,250	12.31

Bidder: Central Alabama Partnership, L.P. 132			
Members: Hopper Telecommunications Company (Walnut Grove, AL)			
Moundville Telephone Company (Moundville, AL)			
Ragland Telephone Company (Ragland, AL)			
Montgomery, AL	440,745	13,493,250	30.61
Selma, AL	74,457	442,575	5.94

Bidder: Communications Venture PCS Limited Partnership			
Members: Allendale Telephone Company (Allendale, MI)			
Bloomington Telephone Company (Bloomington, MI)			
Drenthe Telephone Company (Zeeland, MI)			
Westphalia Telephone Company (Westphalia, MI)			
New Paris Telephone (New Paris, IN)			
Anderson, IN	178,808	2,083,711	11.65
Ft. Wayne, IN	646,736	19,629,961	30.35
Muncie, IN	182,386	2,396,461	13.14

Bidder: Comtel PCS Mainstreet Limited Partnership			
Member: Poka Lambro Telephone Cooperative (Tahoka, TX)			
Lawton-Duncan, OK	177,890	1,806,083	10.16

Bidder: Enterprise Communications Partnership			
Member: Public Service Telephone Company (Reynolds, GA)			
Albany-Tifton, GA	324,899	4,839,750	14.90
Dothan-Enterprise, AL	210,225	4,518,000	21.49
La Grange, GA	64,164	864,750	13.48
Opelika-Auburn, AL	124,022	891,749	7.19

Bidder: Georgia Independent PCS Corporation			
Members: Northeast Florida Telephone Company (Macclenny, FL)			
Ringgold Telephone Company (Ringgold, GA)			
Macon-Warner Robins, GA	589,208	11,700,075	19.86
Bidder: Kansas Personal Communication Services, LTD			
Member: Council Grove Telephone Company (Council Grove, KS)			
Emporia, KS	46,157	799,500	17.32
Hutchinson, KS	125,094	441,000	3.52
Topeka, KS	245,679	8,457,750	34.43

Bidder: Meretel Communications, L.P.			
Members: Cameron Communications Corporation (Sulphur, LA)			
East Ascension Telephone Company (Gonzales, LA)			
Baton Rouge, LA	623,657	25,515,000	40.91
Beaumont-Port Arthur, TX	432,129	15,083,250	34.91
Hammond, LA	95,583	2,466,075	25.80
Lafayette-New Iberia, LA	496,579	15,265,500	30.74
Lufkin-Nacogdoches, TX	144,081	2,840,250	19.71

Bidder: North Dakota PCS Limited Partnership			
Members: Halstad Telephone Company (Halstad, MN)			
Garden Valley Telephone Company (Erskine, MN)			
Rothsay Telephone Company (Rothsay, MN)			
Fargo, ND	298,015	6,776,475	22.74
Grand Forks, ND	213,932	1,899,683	8.90

Bidder: Northern Michigan PCS Consortium, L.L.C.
Members: S&A Telephone Company (Allen, KS)
Emigon County Telephone Company
(Ontonagon, MI)

Alpena, MI	63,429	475,500	7.50
Escanaba, MI	46,082	1,257,750	27.29
Houghton, MI	45,101	180,375	4.00
Iron Mountain, MI	44,596	318,750	7.15
Ironwood, MI	33,059	198,356	6.00
Marquette, MI	79,859	1,252,500	15.68
Sault Ste. Marie, MI	51,041	929,250	18.21

Bidder: PVT Wireless Limited Partnership
Member: Poka Lambro Telephone Cooperative
(Tahoka, TX)

Roswell, NM	70,068	1,174,512	16.76
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Bidder: Poka Lambro PCS
Member: Poka Lambro Telephone Cooperative
(Tahoka, TX)

Abilene, TX	253,174	4,024,583	15.90
Big Spring, TX	34,589	650,625	18.81
Lubbock, TX	392,901	4,385,333	11.16
Midland, TX	111,567	2,328,084	20.87
Odessa, TX	213,420	3,658,505	17.14
San Angelo, TX	155,845	2,972,333	19.07

Bidder: Poka Lambro/PVT Wireless Limited Partnership
Member: Poka Lambro Telephone Cooperative (Tahoka, TX)

Clovis, NM	71,024	375,006	5.28
Hobbs, NM	55,765	445,506	7.99

Bidder: RT Communications
Member: RT Communications (Worland, WY)

Riverton, WY	46,859	398,250	8.50
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Bidder: Savannah Independent PCS Corporation
Members: Northeast Florida Telephone Company
(Macclenny, FL)
Ringgold Telephone Company (Ringgold, GA)

Augusta, GA	521,822	13,067,250	25.04
Waycross, GA	99,034	576,750	5.82

Bidder: Southern Wireless, L.P.
Member: Hargray Telephone Company (Hilton Head Island, SC)

Savannah, GA	630,180	19,875,000	31.54
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Bidder: Southwest Minnesota PCS Limited Partnership
Members: Halstad Telephone Company (Halstad, MN)
Garden Valley Telephone Company (Erskine, MN)
Lakedale Telephone Company (Annandale, MN)

Willmar-Marshall, MN	123,749	512,011	4.14
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Bidder: Virginia PCS Alliance Consortium
Members: Buggs Island Telephone Cooperative
(Bracey, VA)
Highland Telephone Cooperative (Monterey, VA)
North River Telephone Cooperative (Mt. Crawford, VA)
Pembroke Telephone Cooperative (Pembroke, VA)
Hardy Telephone Company (Lost River, WV)

Charlottesville, VA	190,128	7,415,250	39.00
Winchester, VA	137,549	4,978,500	36.19

Bidder: Western Minnesota PCS Limited Partnership
Members: Federated Telephone Cooperative (Chokio, MN)
Park Region Mutual Telephone Company
(Underwood, MN)

Brainerd, MN	78,465	333,300	4.25
Fergus Falls, MN	120,167	527,026	4.39

**This information was adopted from Federal Communications Commission (FCC) records. The FCC states that the data may not be 100 percent accurate.*

...the first question you've got to ask yourself is which technology to deploy. ... That decision will more or less help you decide on a manufacturer. Then you gotta go to the manufacturer and ask 'Can you deliver?'"

And what will build-out cost? While the actual dollar amount telcos will spend on build-out depends on a number of factors — including the type of technology used to deploy the system, the area the company serves, and the number of sub-

scribers — companies will have to find the capital first to pay for the spectrum and then for switches, interconnection with local exchange companies, towers, antennas, and other facilities and services.

Many of the larger companies that won A and B spectrum licenses are looking to vendors to finance equipment and infrastructure. Can all the smaller companies that won C-Block licenses also count on vendors to extend attractive financing arrangements? Not according to Hank Buchanan, vice president of marketing for the Rural Telephone Finance Cooperative (Herndon, VA), who says small companies are going to be hard pressed to get vendor financing for their projects. "Most companies thought that vendors would provide financing because they did it in cellular — in some instances up to 150 percent of the equipment costs," says Buchanan. "[For PCS build-out], I believe C-Block winners are going to find vendor financing more problematic. A lot of these vendors extended quite a bit of credit to big players in the A and B blocks, such as PCS PrimeCo and Sprint Spectrum. The vendors want very much to provide the equipment for those systems, so they're willing to give very favorable financing terms. But if you extend too much credit, pretty soon rating agencies start to look at you. There is a limit to how much credit vendors can extend. So I think they're going to look very closely at the C-Block."

While vendors may not slam the door on smaller companies, careful planning on the company's part is key. Maureen Wayling, vice president, sales, wireless networks for Nortel (Research Triangle Park, NC), says her company would like to work with

license winners in developing overall network strategy and build-out. She cautions, however, that when shopping for financing arrangements from vendors and other commercial institutions, small telcos must bring to the table a "solid" business plan.

Another area that could hurt small companies in financing is license ownership. Unlike A and B players who had to pay for their licenses in lump sum, C-Block winners are buying their licenses from the government via a 10-year payment plan — one of the perks of the entrepreneur process. While the government finances the license, however, it holds a lien on it as well. Therefore, if the PCS entity goes bust, lenders won't have anything tangible to recover except the assets of the individual companies.

While NTCA members and other small companies expect success with their PCS undertakings — many expect positive cash flow within five years — they bid on licenses in groups, set up, in most cases, as consortiums, corporations, or limited liability partnerships. One advantage of such arrangements is the protection against liability for the individual companies. Buchanan says, however, that these are exactly the types of structures with which lenders are not particularly enamored. "Telcos that want to get into PCS will have to put a lot at risk in terms of their own telcos; the PCS [company] is not going to be the only company at risk. The telcos behind the companies will have to assume risk as well."

Sizing Up the Options

Two other PCS issues telcos face are selecting the proper technology to deploy to carry the service and facing a market with a limited supply of available equipment.

"I think the first question you've got to ask yourself is which technology to deploy," says Don Bond, president and general manager of Public Service Telephone Company (Reynolds, GA), a member of Enterprise Communications Partnership, which walked away with four C-Block licenses. "That decision will more or less help you decide on a manufacturer. Then you gotta go to the manufacturer and ask 'Can you deliver?'"

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More towers are needed for transmission — in some cases four to eight times more towers to cover the same area.

There are several technologies currently used to deploy PCS. The four most prevalent are: CDMA

(code division multiple access); TDMA (time division multiple access); GSM (global system for mobile communications); and PACS (personal access communications). Each has its own benefits, and telcos will have to choose the technology that best fits their needs.

According to Moffat, the advantage of GSM is that it can be "rolled out quickly." On the other hand, if cost is a major concern, PACS may be a good choice. Why? "It's cheap," says Moffat. He also notes that it's basically good for fixed wireless local loop, "walk around town" or low-mobility service. In addition, it costs about 50 percent to 75 percent of what CDMA does for build-out. Controlling costs and effective local marketing, he explains, are going to be key for success in PCS. "If rural telcos have to install a new switch and a bunch of radio sites at a quarter million dollars apiece and spread the cost across a relatively small group of users, it's not going to be very cost effective," he says. "That [being cost effective] is one of the biggest challenges rural telcos face in rolling out services."

CDMA proponents say the technology is more fraud-resistant than GSM. According to Moffat, it probably offers the best solution in terms of the number of users you can put in a cell. Moffat estimates that about 60 percent of the industry is committed to CDMA and 40 percent to GSM. CDMA is about a year behind GSM, however.

Still, some companies aren't hooked yet on any one technology. Stuart Hamilton, who did the bidding for Meretel Communications, L.P., a Louisiana-based group comprised of such companies as East Ascension Telephone Company (Gonzales) and Mercury Cellular Paging, a subsidiary of Cameron Communications Corporation (Sulphur), says his company is still determining the right technology to use but sees no clear-cut leader.

And cost may not be the primary concern on telcos' minds, either. "Don't misinterpret this," says New Paris's Grady, "but I'm less concerned about

the pricing than I am about the features that vendors are going to have available for our subscribers. I think getting into this business is going to require a small company to develop some vendor relationships that they didn't have before. Very few small companies have ever needed to purchase billing and support systems for such a potentially large group of wireless subscribers."

Further, with A and B players currently setting up shop in larger areas, some telcos worry that such necessary equipment simply may not be available any time soon. "I think that availability of switching and transmission equipment is going to be somewhat critical because the larger markets are going to take up all the manufacturing capacity that exists," says Grady.

Don Bond agrees: "I think they [A and B winners] have placed their orders with these manufacturers...and that means they have locked up all manufacturer slots until Christmas."

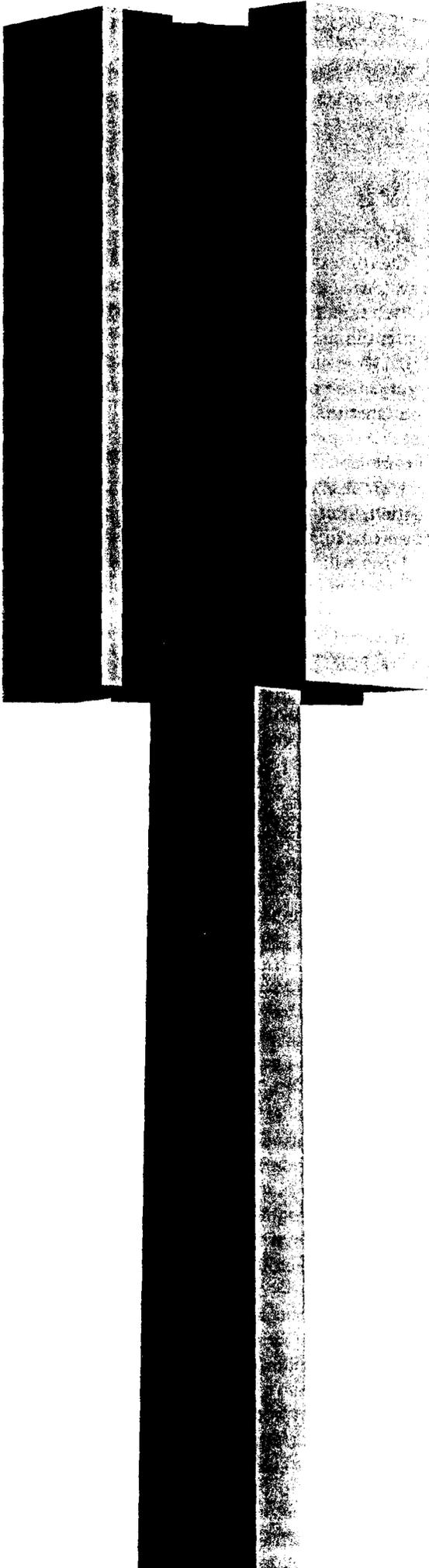
In addition to equipment, Grady also believes there will be a lack of available expertise for telcos to employ in technical, marketing, and management areas as well. Moffat disagrees. "There are lots of people standing around wanting to help them, for a price of course."

Finding a Place to Put it All

Another imposing challenge for telcos in the build-out stage will be to find suitable tower and antenna sites and to obtain zoning approval for them. Because PCS operates on a higher frequency than traditional cellular, signals don't travel as far. As a result, more towers are needed for transmission — in some cases four to eight times more towers to cover the same area.

"Some cities in the state [Alabama] have already required co-tenants on towers," says Jimmy Campbell. "In other words if you put up a tower, you have to build it so that it can accommodate at least one more tenant and you have to make it available to anyone, including competitors. That alone almost cuts the number of towers in half."

Most people herald the convenience of wireless service, and the numbers show people want it. Some NTCA members, however, fear they may encounter a "not-in-my-back-yard attitude" from residents who simply don't want so many structures around their towns.



Meretel's Hamilton says his company dealt with the tower issue before in its cellular operations. He adds: "Not all the antennas will be in towers. A lot of them will be on buildings or on poles or smaller structures that should be less disruptive to local areas."

Clearing the Path to Service

Some areas already have incumbent microwave users, mostly municipal governments and agencies that use the same frequency of spectrum now owned by C-Block users. Both parties generally cannot use the spectrum at the same time without encountering transmission interference, so C-Block winners may have to contend with moving the incumbents. Stories already abound about incumbents that would incur costs of \$1 million to relocate, but when negotiating with license winners, ask for \$5 million. Who bears the cost? The telco may have to. The FCC previously adopted rules regarding spectrum clearing. They include setting up time periods to negotiate relocation and mandating that license winners move incumbents to "comparable" or "superior" systems.

The FCC is considering changing its rules on the issue. It plans, among other things, to address whether: to clarify the definition of "good faith" negotiations, which some license winners are already holding with incumbents; to clarify "comparable" facilities; to place a time limit on PCS licensees' obligations to provide comparable facilities; and to adopt a strategy that would allow PCS licensees that incur relocation costs to be reimbursed for a portion of the cost by other license winners that also benefit from the clearance of the spectrum. "I think if you sit around and wait on the FCC, that's all that'll ever happen," says Warren Catlett, who did all the bidding on behalf of Virginia PCS Alliance Consortium. Comprised of 10 telcos, including five NCTA members, this group won two licenses in Virginia and is awaiting FCC approval on its partitioning agreement with PCS PrimeCo to pick up five more licenses in the state. "We're talking with people who are already using the spectrum and trying to decide the path to proceed," Catlett added.

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We would like to thank Nortel (Research Triangle Park, NC) for supplying us reference materials for the handset and antennas that appear on the cover and throughout this article.

Grady says he doesn't see microwave relocation as a problem in his area: "We've had some good discussions with several of the entities in our areas, most of which are broadcasters. They've been generally responsive."

"I think the areas along the Gulf Coast will have the toughest problems," says Hamilton. "That's where you have the highest concentration of microwave."

"...It's going to boil down to marketing and packaging of the product. That's what's going to differentiate the services."

The Cellular Question

Industry pundits bill PCS as the

future of wireless service. Unlike traditional cellular, which is an analog service, PCS is entirely digital, offering better quality communication, better security against fraud and eavesdropping, and smaller and lighter handsets that are not only expected to be cheaper but include such features as a sleep mode that can prolong battery life of a single charge of up to 100 hours. Do members see these factors as giving PCS an edge over cellular? Perhaps, at least initially. Most say the two will work together.

"I think that PCS is going to complement cellular," says Orlean Smith. "A lot of people are going to have two phones or a dual-mode phone that allows them to use either PCS or cellular." He says that because cellular offers more roaming ability than PCS, at least during the next few years, cellular has an advantage: "Cellular already has systems in place that allow you to travel from one area to another and use the phone. Until PCS gets to that point, people using PCS phones will not have that advantage. With PCS, if people in Lafayette travel to Dallas, they may not be able to use their phones because PCS providers don't have roaming agreements in place. And that's not going to come overnight. I think it'll take at least five years. That's how long it took cellular."

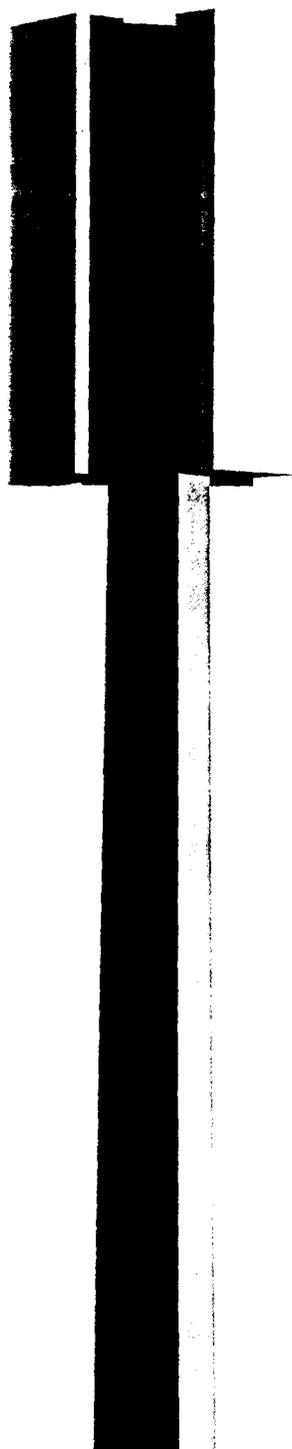
"In the context of traditional cellular, PCS will be superior," says Catlett. "But that may change in about five years. I think the technology will be transparent in the frequency, whether it's 2 GHz or 800 MHz. It's going to boil down to marketing and packaging of the product. That's what's going to differentiate the services."

Isn't PCS supposed to be less expensive? "Yes," says Catlett. "But the lower cost to the end user will be driven less by technology or the inherent cost of cellular vs. PCS than by the market realities of multiple competitors. When you hear people say that PCS will be cheaper because it's digital, I think that's baloney."

Into the Future

Despite the hurdles they've already encountered — and those still to come — most members see a bright future ahead for their PCS projects.

Raymond Henegan, general manager of Cameron Communications, which currently offers cellular, says his company got into the auction



to become a "total" telecommunications provider. "We don't care what the competition offers, we can now offer PCS, cellular in place of PCS, and wireline. Therefore we feel we have the best edge."

Says Grady: "We felt it was strategically important for us to establish an operating system to diversify the portfolio of our business ventures. We're also in the cable TV business, Internet services, paging, voice-mail, and conferencing, just about every aspect of service that conceivably exists...we just viewed this [PCS] as a logical extension....We felt that it was a worthwhile investment, and I continue to believe that."

"We got into it in case something big happens," says Smith. "We didn't want to get left out completely. It wasn't something we went into saying, 'We're going to make money at this.' We got into it to cover our backs."

"We got involved first because we wanted to protect and diversify our services, so that we could protect what has fed us for the past 50 years," says Campbell. "We see it as a pretty good investment."

Down the road, Campbell notes: "We'll be able to offer not only high-mobility wireless services but also, at some point, to concentrate heavily on wireless local loop or local loop replacement. At this point, the opportunities appear endless." ■

Matthew A. Green Jr. is NTCA Managing Editor

COMPETITION

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May in Nashville, and additional educational seminars are currently being developed.

The common denominator in all these efforts is providing better service to our members. Small and rural telcos must be proactive — not only meeting subscribers' needs, but anticipating them and conducting their operations accordingly. So too must our association constantly examine its efforts and develop new programs to keep our members on the cutting edge. We'll let you know more about these strategic initiatives in the coming months. In the meantime, enjoy the games. ■

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CERTIFICATE OF SERVICE

I, Gail C. Malloy, certify that a copy of the foregoing Comments of the National Telephone Cooperative Association in WT Docket No. 97-82 was served on this 23rd day of June 1997, by first-class, U.S. Mail, postage prepaid, to the following persons on the attached list:



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