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February 5, 1997

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FEDERAL COMMUNICATIONS COMMISSION

HAND DELIVERY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW
Room 222
Washington, DC 20554

Re: GN Docket No. 96-228, Ex Parte Presentation

Dear Mr. Caton:

Pursuant to Section 1.1206 of the Commission's Rules, this letter is to advise you that Mark Tauber and I, on behalf of Omnipoint Corporation, and Andrew Arnoff and Douglas Smith of Omnipoint Corporation, met today with Rudolfo Baca, Legal Advisor, Office of Commissioner Quello. The main focus of this meeting was to discuss Omnipoint's concerns regarding the timing of the 2.3 GHz spectrum auction. In accordance with the Commission's rules, I hereby submit one original and one copy of this letter, each with a copy of the presentation materials used during the meeting, for inclusion in the above-referenced docket.

Sincerely,

Terrie Schmitz

Terrie Schmitz
Counsel for Omnipoint Corporation

cc: Rudolfo Baca

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Ex Parte Presentation
February 5, 1997

OMNIPOINT CORPORATION

WIRELESS COMMUNICATIONS SERVICES (WCS)
GN Docket No. 96-228

1. The Commission Should Establish a 10 MHz WCS Spectrum Cap

• A WCS spectrum cap will further the Commission's statutory obligation to disseminate licenses to a wide variety of licensees.

• Prevents licensees from aggregating WCS spectrum at will to the detriment of entrepreneurial PCS providers.

2. WCS Spectrum Should Not Be Used to Provide CMRS Offerings

• WCS spectrum would be better utilized for new fixed services, such as wireless local loop and Internet access, and public safety services which otherwise lack access to sufficient spectrum.

• The technical realities of equipment manufacturing and production show that PCS-like mobile service will not be feasible in the 2.3 GHz band for several years.

3. The WCS License Band Plan Should Accommodate a Variety of Service Applications

• Omnipoint proposes licenses of blocks of one, two, three, four, and five MHz.

• Bidders can acquire paired channels through the auction process, if they so desire.

• Auctioning spectrum in paired channels forces data and one-way microwave providers to bid on more spectrum than necessary.

• MTAs and BTAs are more logical service areas than EAs, because WCS licensees will be able to operate systems off of the network of a single CMRS provider. Licensing issues with Rand McNally can be handled through private negotiations, similar to those taking place prior to the broadband PCS auction.

• Forcing providers to bid on more spectrum than needed is inefficient and an undue burden on small businesses trying to raise capital to acquire 2.3 GHz spectrum.

4. The Commission Can Implement Auction Acceleration Methods To Close The Auction Within The Time Constraints Mandated By Congress

- The Commission can implement higher bidding increments and provide for more rounds per day for all 2.3 GHz licenses to naturally close the auction in a timely manner.

5. A Single, Nationwide WCS License Will Prevent Diverse Service Offerings and Hurt Small Businesses

- Small, entrepreneurial businesses would be precluded from participating in the auction because the cost of 2.3 GHz spectrum would be prohibitive.

- Innovative 2.3 GHz service offerings would be stymied as one licensee implements one uniform business plan for the entire 30 MHz of WCS spectrum.

- Disaggregation and partitioning by a national licensee does not ensure that spectrum will be disseminated to multiple service providers.

POTENTIAL SOLUTION TO PROBLEM OF HOW TO EXPEDITE CLOSE OF SIMULTANEOUS MULTIPLE ROUND AUCTION

I. EXECUTIVE SUMMARY

In Stage III of a simultaneous multiple round auction, a problem can arise in which small numbers of bids per round extend the auction almost indefinitely. We propose an "Acceleration Method" as a tool that can be implemented by the FCC if the auction reaches such a low-activity phase. The Method provides that the minimum acceptable bid increases for all licenses in each successive round, even if a license has not received a bid in that round. This Method, which is simple and consistent with existing auction rules, ensures that this final phase of the auction comes to a rapid, orderly, and fair conclusion.

II. EXAMPLE

To illustrate conceptually, we compare the Acceleration Method to the "traditional" minimum bid increment calculation of the greater of a percentage of the high bid on a license and a dollar per bid unit in Table I. We assume an auction of three bands and many BTAs, much like the just-completed D, E, F auction. The six licenses shown, or three bands (D, E, and F) for each of two BTAs, BTA 1 and BTA 2, are each assumed to have a high bid of $2.00/pop. Four companies, #1, #2, #3, and #4, place bids in the rounds shown, where company #1 is the aggressor, bidding each license of BTA 1 in turn, and the other three companies, #2, #3, and #4 are the incumbent high bidders on bands D, E, and F, respectively. For simplicity, we assume these incumbents simply bid back the licenses from company #1. The ellipsis in Table I assumes that company #1 cycles its bidding through the D, E, and F licenses of BTA 1 over and over again, driving up prices across the BTA.

On the left side of Table I, the "traditional" minimum bid increment calculation proceeds as the greater of 5% of the high bid or 10 cents per pop (equivalent to 1 cent per bid unit

for a 10 MHz license). The right side shows what happens if, starting in the round 82, the Acceleration Method is applied instead to the six licenses.

Under the traditional calculation, in 42 rounds, or by round 122, the prices of BTA 1 will have approximately doubled. If company #1 reached its budget at $4.00/pop and BTA 2 were a viable alternative to BTA 1, it could then shift its bidding to the three bands of BTA 2, and so on. Meanwhile, under the Acceleration Method, BTA 1's prices approximately double in 14 rounds, and, so do BTA 2's prices! Thus, in the illustration, the Acceleration Method decreases the number of elapsed rounds by a ratio of three to one, and reduces the attractiveness of alternatives rapidly. The round compression effect is more pronounced the more licenses are interchangeable, i.e., ten interchangeable licenses per BTA would have a 10:1 ratio in our example.

III. THE PROPOSED ACCELERATION METHOD

Simply put, the Acceleration Method provides that the minimum bid price for each license will increase in every round regardless of whether or not it receives a bid. Specifically, the minimum bid for the next round would be the **greater of** (a) five percent (or $0.10 per pop, if greater) more than the new high bid, or (b) five percent more than the **prior round minimum bid** (even if the license does not receive a bid). It is this last provision that serves to accelerate the orderly close of the auction, causing the minimum bid of all markets to increase. It eliminates the sequential nature of bidding on small, inexpensive markets, which may be the most troublesome potential cause of extended auctions. Note that the FCC may come up with variations in the specific percentages. This simple idea, when used at the end of a simultaneous auction (i.e., later in Stage III), is an extremely fair and effective way of addressing the auction-extending dilemmas.

IV. BENEFITS OF PROPOSED METHOD

A. EFFECT ON BIDDER BEHAVIOR TO BRING AUCTION TO MORE RAPID CLOSE

Under the Acceleration Method, if all markets are going up it does no good for bidders to "park" on markets they don't really want if they are simply delaying going to the markets they actually want, because those desired unbid markets are still going up at 5%. As important, bidders who are battling for a market that they really do want now have an incentive to bid almost immediately at a price close to (or just below) the "true" value they place on that market. The reason they have this incentive is that they will want to know in as few rounds as possible whether or not they are going to win the markets that are their first choices. Otherwise, if they take many rounds to drive a market to its "true" value for them before coming off, then their second choice markets will have gone up significantly in price.

It is also clear under this proposed acceleration method that bidders have no incentive to prolong the auction, since the markets they truly want will double in price (i.e., minimum acceptable bid) every 14 rounds. Note that a further advantage of this does not prevent bidders from going onto markets late in the auction, it simply raises the cost of delay.

B. SIMPLICITY OF CONCEPT

The Acceleration Method is inherently simple in concept, making it easy for bidders to understand, adapt to, and plan for. This simplicity of the method gives it an inherent fairness.

C. SIMPLICITY OF IMPLEMENTATION

The simplicity of the Method also makes it very straightforward and reliable to implement, both in the FCC's electronic bidding software and in bidders' own decision support systems. It seems fair to say, for example, that it is much simpler to program than the initial minimum bid matrix used in the first part of the DEF auction.

D. CONSISTENT WITH AUCTION RULES

The Acceleration Method is inherently consistent with the published FCC auction rules and prior practice. Specifically, the August 26, 1996 Bidder Information Package (page 48) states the FCC's plans for "increasing the pace of the auction by...increasing the minimum bid increments" as one of its alternatives.

Table I

Traditional Minimum Bid Increment Calculation

	BTA 1			BTA 2 (alternative)		
	D Band / Bidder	E Band / Bidder	F Band / Bidder	D Band / Bidder	E Band / Bidder	F Band / Bidder
ROUND 81						
High	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00
Bid	$2.10 #1					
Next Round's Minimum Bid	**$2.21**	**$2.10**	**$2.10**	**$2.10**	**$2.10**	**$2.10**
ROUND 82						
High	$2.10	$2.00	$2.00	$2.00	$2.00	$2.00
Bid	$2.21 #2					
Minimum Bid	**$2.32**	**$2.10**	**$2.10**	**$2.10**	**$2.10**	**$2.10**
ROUND 83						
High	$2.21	$2.00	$2.00	$2.00	$2.00	$2.00
Bid		$2.10 #1				
Minimum Bid	**$2.32**	**$2.21**	**$2.10**	**$2.10**	**$2.10**	**$2.10**
ROUND 84						
High	$2.21	$2.10	$2.00	$2.00	$2.00	$2.00
Bid		$2.21 #3				
Minimum Bid	**$2.32**	**$2.32**	**$2.10**	**$2.10**	**$2.10**	**$2.10**
ROUND 85						
High	$2.21	$2.21	$2.00	$2.00	$2.00	$2.00
Bid			$2.10 #1			
Minimum Bid	**$2.32**	**$2.32**	**$2.21**	**$2.10**	**$2.10**	**$2.10**

Acceleration Method's Minimum Bid Increment Calculation

	BTA 1			BTA 2 (alternative)		
	D Band / Bidder	E Band / Bidder	F Band / Bidder	D Band / Bidder	E Band / Bidder	F Band / Bidder
ROUND 81						
High	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00
Bid	$2.10 #1					
Minimum Bid	**$2.21**	**$2.10**	**$2.10**	**$2.10**	**$2.10**	**$2.10**
ROUND 82						
High	$2.10	$2.00	$2.00	$2.00	$2.00	$2.00
Bid	$2.21 #2					
Minimum Bid	**$2.32**	**$2.21**	**$2.21**	**$2.21**	**$2.21**	**$2.21**
ROUND 83						
High	$2.21	$2.00	$2.00	$2.00	$2.00	$2.00
Bid		$2.21 #1				
Minimum Bid	**$2.43**	**$2.32**	**$2.32**	**$2.32**	**$2.32**	**$2.32**
ROUND 84						
High	$2.21	$2.21	$2.00	$2.00	$2.00	$2.00
Bid		$2.32 #3				
Minimum Bid	**$2.55**	**$2.43**	**$2.43**	**$2.43**	**$2.43**	**$2.43**
ROUND 85						
High	$2.21	$2.32	$2.00	$2.00	$2.00	$2.00
Bid			$2.43 #1			
Minimum Bid	**$2.68**	**$2.55**	**$2.55**	**$2.55**	**$2.55**	**$2.55**

Table I

Traditional Minimum Bid Increment Calculation

	BTA 1						BTA 2 (alternative)					
	D Band	Bidder	E Band	Bidder	F Band	Bidder	D Band	Bidder	E Band	Bidder	F Band	Bidder
ROUND 86												
High	$2.21		$2.21		$2.10		$2.00		$2.00		$2.00	
Bid					$2.21	#4						
Minimum Bid	**$2.32**		**$2.32**		**$2.32**		**$2.10**		**$2.10**		**$2.10**	
			⋮						⋮			
			V						V			
ROUND 122												
High	$3.96		$3.96		$3.77		$2.00		$2.00		$2.00	
Bid					$3.96	#4						
Minimum Bid	**$4.16**		**$4.16**		**$4.16**		**$2.10**		**$2.10**		**$2.10**	

Acceleration Method's Minimum Bid Increment Calculation

	BTA 1						BTA 2 (alternative)						
	D Band	Bidder	E Band	Bidder	F Band	Bidder	D Band	Bidder	E Band	Bidder	F Band	Bidder	
ROUND 86													
High	$2.21		$2.32		$2.43		$2.00		$2.00		$2.00		
Bid					$2.55	#4							
Minimum Bid	**$2.81**		**$2.68**		**$2.68**		**$2.68**		**$2.68**		**$2.68**		
			⋮						⋮				
			V						V				
ROUND 94													
High	$3.77		$3.10		$3.42		$2.00		$2.00		$2.00		
Bid	$3.96	#2											
Minimum Bid	**$4.16**		**$3.96**		**$3.96**		**$3.96**		**$3.96**		**$3.96**		

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of	)	
	)	
Amendment of the Commission's Rules to	)	
Establish Part 27, the Wireless	)	GN Docket No. 96-228
Communications Service ("WCS")	)	

COMMENTS OF OMNIPOINT CORPORATION

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Date: December 4, 1996

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Summary

Omnipoint believes that the time pressure imposed on the Commission by Congress to adopt rules for and auction licenses in the 2.3 GHz band actually militates against the Commission's proposal to assign the band to "general" wireless use, without any further definition or guidelines. The Commission's statutory and avowed mandate to utilize the spectrum efficiently dictates that the Commission define more carefully the permissible services for 2.3 GHz licensed spectrum. The creation of an entire service from whole cloth should not be accomplished through "rush to judgement" procedures. Omnipoint is especially concerned that the current perception of the 2.3 GHz band as another PCS offering is seriously flawed. The technical realities are that 2.3 GHz will not be developed for mobile purposes in the foreseeable future. It is contrary to the public interest, in this case, for the Commission to simply let these misconceptions persist because after the 2.3 GHz auction, when reality sets in, no new or useful services will result.

Thus, Omnipoint encourages the Commission to consider a more detailed band plan customized to accommodate services the need for which is already widely recognized to exist -- wireless local loop and wireless Internet access. Specifically, Omnipoint proposes the adoption of rules that would (1) establish five licenses in each of the lower and upper bands, consisting of one, two, three, four and five MHz, respectively; (2) utilize BTA or MTA, but not national, license areas; (3) limit transmit power output to only a few watts to insure public safety; (4) impose build-out obligations and a spectrum cap on licensees; and (5) modify certain auction procedures in order to insure small business participation.

Affordable Internet access is presently among the highest national priorities. Utilizing the 2.3 GHz band for this purpose would be timely and clearly serve the public interest. The Commission should adopt Omnipoint's band plan.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of	)	
	)	
Amendment of the Commission's Rules to	)	
Establish Part 27, the Wireless	)	GN Docket No. 96-228
Communications Service ("WCS")	)	

COMMENTS OF OMNIPOINT CORPORATION

Omnipoint Corporation, by its attorneys, files these comments to the Commission's Notice of Proposed Rule Making[1] ("NPRM") in the above-captioned proceeding.

I. The Commission Should Promote the 2.3 GHz Band for Services With A Widely-Recognized Need -- Wireless Local Loop and Wireless Internet Access

While Omnipoint certainly encourages the Commission to promulgate WCS auction and service rules in a timely manner that will promote responsible and efficient investment in emerging wireless services,[2] Omnipoint also believes that the extreme time pressures of this proceeding dictated by Congress requires for the Commission to set definitive rules identifying

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1 Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service ("WCS"), Notice of Proposed Rule Making, GN Dkt. No. 96-228 (rel. Nov. 12, 1996).

2 The Omnibus Consolidated Appropriations Act, 1997, ("Appropriations Act") requires the Commission to: reallocate 30 MHz of spectrum (at 2305-20 and 2345-60 MHz) for licensed wireless services, consistent with international agreements and pursuant to auction; promote the most efficient use of the spectrum; and take into account the needs of public safety radio services. The auction must commence by April 15, 1997 and auction proceeds must be deposited by September 30, 1997.

specific services that make the most efficient use of the spectrum consistent with the public interest. Given these circumstances, the Commission's proposal for a completely open-ended wireless service could actually backfire and disserve the public. The technical realities of equipment manufacturing and production ensure that PCS-like mobile services at 2.3 GHz will not be possible for years to come. Rather than rushing to adopt rules that provide no guidance whatsoever as to the purpose of the licensed spectrum and further the public misperception that 2.3 GHz is amenable for PCS, Omnipoint strongly suggests that the Commission take a proactive course to promote the services that would obviously serve a national consensus and a proven need -- wireless local loop ("WLL") and wireless Internet access ("WIA"). We note that by promoting WLL and WIA through service and technical rules, but not prohibiting mobile uses of the spectrum, the Commission preserves tremendous flexibility for the future operators. Giving the 2.3 GHz meaning as targeted primarily for WLL and WIA, and adopting appropriate rules to support those services, is the only way to attract the nascent WLL and WIA industry members to this proceeding.

Without a definitive service allocation from the Commission for wireless local loop and Internet access, it is unlikely that the computer and software industry would be sufficiently attracted to this proceeding or the subsequent auction. In general, public spectrum issues and the provision of FCC licensed, spectrum-based services to the public, are completely foreign to the computer hardware and software industry. In the same way, the groundwork for the success of the PCS auctions and PCS services did not appear overnight -- it was laid through years of arduous proceedings at the Commission solving a host of difficult issues. These comprehensive PCS proceedings not only established workable PCS service regulations, they allowed the industry time to develop both a market assessment of demand for PCS as well as time to build products to meet the operators needs before the PCS auctions commenced. For example, well

before a single PCS auction date had been set the PCS proceedings fostered *over 130 experimental licensees and hundreds of valuable experimental reports* on PCS.[3]

In assessing the public interest to be served through the commercial use of the 2.3 GHz band, the Commission should acknowledge that *no new services* will emerge without further definition of the purposes for the band. Market forces in PCS were built on years of discussion and work that culminated in the auctions and public interest benefits for consumers. However, the Commission cannot replicate those public interest results in the 2.3 GHz auction by announcing a "spectrum sale" in April. Without a similar, if expedited, process prior to the 2.3 GHz auctions, as occurred with PCS, the public interest will almost certainly not be served. The "dumping" of spectrum on the market, which is the current market perception of the Commission's 2.3 GHz proposal, will benefit only the wealthiest few bidders, who will either use it to circumvent the PCS rules or inventory it until they develop a use for the spectrum at some time in the future.

Wall Street is convinced that the rush to unload the 2.3 GHz spectrum will enable a few bidders to find value in the spectrum simply as an opportunity to circumvent the PCS rules that were carefully crafted over many years. The prevailing perception that the 2.3 GHz spectrum is a backdoor means to PCS spectrum comes not because WCS will serve the public interest by meeting further demand for mobile service. Rather, the WCS spectrum is viewed as a PCS opportunity because (a) the NPRM suggests that bidders may obtain significantly better regulatory treatment than other CMRS providers (e.g., no build-out requirement; rules favoring large licenses, no spectrum caps, etc.); (b) no other parties but the telecom giants who also

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3 In addition, dozens of major market research studies and massive customer trials were conducted, with results published in the public domain. Chip set developers had time to develop the components, equipment vendors developed prototypes, and entire subsystem support industries were provided with time to develop (for RF planning, cell site acquisition, billing systems, etc.).

provide PCS service are ready, financially or operationally, to take advantage of this rushed auction, and (c) those who were outbid in the PCS auction will presumably attempt to acquire 2.3 GHz spectrum for PCS applications, while PCS bidders have already spent billions of dollars assuming that the government would not alter the fundamental ground rules with sudden releases of additional mobile spectrum.

Omnipoint believes that WCS can and should meet the significant consumer demand for wireless local loop and wireless Internet access services. While the 2.3 GHz band need not be devoted exclusively to WLL and WIA, unless the Commission guides industry participants toward this use, it is highly improbable that emerging computer and software participants can possibly accomplish in a few weeks what the PCS industry took years to assemble. Moreover, promoting affordable Internet access, especially for schools, libraries, and health care facilities, is now a national priority. 47 U.S.C. § 254(h)(2) (FCC mandate to establish rules promoting "access to advanced telecommunications and information services for" schools, libraries, and health care facilities); "In the Matter of Federal-State Joint Board on Universal Service," Recommended Decision, CC Dkt. No. 96-45, FCC 96J-3, at ¶¶ 442-43, 454-55 (rel. Nov. 8, 1996). Several incumbent LECs have raised with the Commission the issue of congestion of the traditional local voice exchange by Internet access traffic.[4] Moreover, the task of wiring aging, often asbestos-filled schools and other public facilities raises daunting budgetary challenges, public health risks, and disruption of necessary public services. The Commission's promulgation of an alternative and viable radio service dedicated to wireless Internet access would further these significant public policy concerns.

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4 *See* CPB/CCB 96-16 ("Pacific Bell ESP Impact Study," (July 2, 1996); Letter from NYNEX to FCC (July 10, 1996); "Report of Bell Atlantic on Internet Traffic," (June 28, 1996)).

From a technical perspective, while the 2.3 GHz band could, in theory, be used to offer mobile pocket phone applications, such services are years from market reality today. There are currently no silicon-based chip set vendors that have products for the 2.3 GHz band, and such chip sets will not be produced for 18 to 24 months after a 2.3 GHz player tenders a significant purchase order with specific technical parameters. In PCS, for example, the 1.9 GHz band was assigned in 1989, while the first chip sets, made of gallium arsinide, were not available until 1991-92 and silicon chip sets were not available until 1995 -- six years after the PCS allocation. The 2.3 GHz handset production, just as in PCS, would require an additional 12 to 24 months after the chip sets are available. Further, the 2.3 GHz handsets would not be capable of roaming onto 1.9 GHz PCS networks unless they are "dual band," which will add to the expense and production time for such a phone (even assuming there is demand).

Unfortunately, some PCS players and investors who may not fully understand the realities of the equipment market will still speculatively bid on the 2.3 GHz spectrum in the hopes that it will be competitive with PCS. Compounding this problem is the NPRM which suggests to many that the Commission believes that 2.3 GHz is well suited for PCS. As a result, Wall Street and investors are likely to ignore these technical realities. Ultimately, and due largely to the lack of time for thorough consideration of the problems facing PCS at 2.3 GHz, many licensees will fail to provide any timely or innovative services to the public. The Commission should show leadership in this proceeding by acknowledging these realities and promoting WLL and WIA applications which are real and viable.

In contrast, most initial wireless local loop and wireless Internet access applications at 2.3 GHz that are demanded by the public would be fixed. Equipment for such services is more readily available because (a) the components do not have to be miniaturized for a mobile handset, (b) the devices do not need to be battery operated and of low-power consumption, (c) devices do not have to offer compatibility for "roaming" onto other networks, and (d) devices do not require high transmit powers since directional gain antennae can serve fixed devices.

Unfortunately, given the expedited nature of this proceeding, very little regulatory consideration has been given to the potential for 2.3 GHz as an alternative for WLL and WIA services. The effect of the Commission's proposal to use the band for "any of the allocation categories of fixed, mobile, radio location, and broadcasting-satellite services" (NPRM at ¶ 9) and the lack of time for a full consideration of other service options, has resulted in a market pre-assumption that the Commission intends for the 2.3 GHz band to be yet more mobile PCS spectrum.

The proposed open-ended WCS rules, as well as the lack of time for industry-wide consideration of alternative uses of the spectrum, will likely result in a 2.3 GHz auction and allocation process for the benefit of only a few large telecommunications companies with fully-funded, fully-staffed auction war chests. We note that the NPRM suggests that the Commission is likely to cast aside any responsibility for the interests of those that do not have access to massive capital, such as small businesses, amateur radio service operators, and public safety radio service operators. These parties surely are entitled to far more consideration in the WCS service and auction rules than is currently proposed.

Omnipoint believes that the 2.3 GHz band need not suffer such a fate. The April deadline places pressure on the Commission to act swiftly, but it should not react by simply giving up on all public interest purposes for the 2.3 GHz spectrum. Instead, the Commission should rename the spectrum WLL and WIA and define the 2.3 GHz band technical and service parameters in a manner that is particularly suitable for wireless Internet access and wireless local loop. The Commission's rules do not need to exclude mobile uses from the WCS, but instead should include feasible and efficient service rules for wireless local loop and wireless Internet access, and should require all licensees to actually serve the public rather than warehouse the spectrum.

Omnipoint recommends, as discussed below, a 2.3 GHz band plan and service rules that it believes would promote participation of a more diverse sector of the communications industry, and encourage participation by wireless data services and small businesses. In addition,

Omnipoint objects to proposals for nationwide licensing, and strongly urges the Commission to reduce the proposed power output limits to avert otherwise inevitable public safety issues.

II. The 2.3 GHz Band Plan Should Provide Flexibility

Given the lack of preparation for the 2.3 GHz offering, the spectrum band plan must permit a significant degree of flexibility for bidders to obtain units of spectrum of many different sizes and patterns. Further, each bidder should be free to aggregate licenses through the auction process in a way that is amenable to a number of different service applications, including Internet access, WLL and DARS. Equally important, the rules that apply to all CMRS and PCS operators (e.g., build-out requirements, CMRS spectrum cap, etc.) should also apply to 2.3 GHz licensees, as well as a service specific 2.3 GHz spectrum cap of 10 MHz for each licensee.

A. Licenses with Multiple RF Spectrum Segments With the Option for Paired or Unpaired Channels

Because auctions have proven to be a highly efficient means for bidders to aggregate spectrum through the acquisition of multiple licenses, the Commission should initiate the band with a "menu" of licenses of different bandwidths. Both the upper and lower 15 MHz bands should be segmented into five licenses of one MHz, two MHz, three MHz, four MHz, and five MHz, respectively. See attached Diagram.

This plan would provide for an efficient menu of choices and permutations for all auction participants. First, the option of different size bandwidths would encourage applicants from a broader cross-section of the telecommunications industry (*i.e.*, WIA, WLL, and DARS providers). The different bandwidth sizes could well accommodate the needs of public safety services as they are relocated out of the 2 GHz PCS spectrum, and parties are finding the bands for relocation increasingly crowded and difficult to work in. Second, licenses of different frequency sizes would permit efficient asymmetric pairing through the auction process. For example, a WIA provider could purchase 5 MHz to transmit, and only two MHz to receive, and thus avoid the unnecessary expense of purchasing a full 5 MHz return channel. Third, not

requiring paired frequencies would allow service providers with one way applications, such as DARS, to purchase (additional) downlink capacity without the expense of an unneeded paired frequency. Finally, because pairing can be readily accomplished through the auction aggregation process, not requiring pairing does not impede symmetrical paired upper and lower band frequencies for those who want such a configuration.

By licensing in increments of one to five MHz, all providers are given the opportunity to purchase only the spectrum that they need in the foreseeable future. This will also improve opportunities for small business participation in the auction.[5]

B. BTA or MTA License Areas

Omnipoint believes that BTAs are the most suitable license areas for WCS licenses because BTAs can always be aggregated into MTAs and, again, the auction process has proven to be efficient at this. *See* NPRM at ¶ 10. In addition, WCS licensing on a BTA basis would also improve opportunities for broadband Block C and F licensees, with overlapping BTA-based networks, to lease infrastructure and other support to independent 2.3 GHz licensees. By contrast, if 2.3 GHz licenses are based on MTAs, 2.3 GHz licensees are more likely to choose larger Block A and B licensees as their primary source for infrastructure leasing, thus disenfranchising small business licensees.

BTAs will also promote "efficient use of the spectrum" by allowing bidders to acquire only those areas that they intend to serve, instead of larger areas with portions that would go unserved.[6] The auction process would also allow carriers to aggregate BTA service areas that

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5 Through partitioning, spectrum disaggregation, as well as post-auction license transfers, small businesses can add spectrum incrementally to meet increased capacity demands.

6 *See, e.g.*, Memorandum Opinion and Order, GN Dkt. No. 90-314, 9 FCC Rcd. 4957, ¶ 78 (1994) (allocating licenses on a BTA basis "addresses the concern that rural buildout would not occur with MTA licenses.").

conform to their own business plans based on the service they intend to offer,[7] either mobile or fixed, as opposed to the Commission's MTA and regional service areas which are based on an assumption that the service is mobile.

Finally, BTA licenses would afford greater auction opportunities for small businesses, in furtherance of the Commission's Section 309(j) obligations. As the Commission noted in adopting BTAs for broadband PCS, "we comply with Congress' directive that we prescribe area designations that promote economic opportunity for a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women."[8] The Commission's proposal to meet its obligations to designated entities through disaggregation and partitioning[9] is insufficient because such mechanisms would essentially rely on larger companies to divest themselves of spectrum, and because it would likely require small businesses to pay a premium over the auction price.

In the alternative, if the Commission decides against BTA licensing, the Commission should use MTA-based licensing. MTAs would at least avoid the inefficiencies of 2.3 GHz license areas that do not overlap with any PCS license areas, which would require negotiation and leasing of infrastructure from more than one PCS operator.

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7 The Commission's permissive transfer and eligibility rules, as well as its streamlined processing of applications, also facilitate easier post-auction aggregation.

8 Memorandum Opinion and Order, GN Dkt. No. 90-314, 9 FCC Rcd. 4957, ¶ 77 (1994). *See, also*, Second Report and Order, GN Dkt. No. 90-314, 8 FCC Rcd. 7700, ¶ 77 (1993) ("BTA service areas will minimize the start-up cost likely to result from competitive bidding, and therefore provide greater opportunity for participation by a variety of PCS [sic] by small businesses, female and minority entrepreneurs, rural telephone companies, and others.").

9 NPRM at ¶ 16.

C. 2.3 GHz Build-Out Requirement

Omnipoint urges the Commission to impose build-out obligations on all 2.3 GHz licensees. The incentive of large service providers and incumbent LECs to impede competition by simply buying out all competitors in the auction will leave the statutory mandate for efficient use of the spectrum largely unserved. Omnipoint recommends that the Commission require WCS licensees to make a showing of substantial service at the five-year licensing benchmark. *See, e.g.*, 47 C.F.R. § 24.203(b). Should the Commission permit 2.3 GHz to offer CMRS services, as the NPRM proposes, it is particularly unfair and contrary to regulatory parity to impose service build-out requirements on CMRS providers while not imposing such requirements on WCS.[10]

D. 2.3 GHz Band Spectrum Cap

Omnipoint supports the Commission's proposal to include 2.3 GHz spectrum within the CMRS spectrum cap and Omnipoint further believes that all licensees should be limited to no more than 10 MHz of 2.3 GHz spectrum. These spectrum caps ensure that the Commission's obligations to disseminate licenses to a wide variety of licensees is upheld.[11] Particularly if the Commission permits 2.3 GHz licensees to offer mobile services, it is contrary to regulatory parity to allow 2.3 GHz licensees a special exemption that their competitors share. Further, unless the 2.3 GHz band is brought within the CMRS spectrum cap, it undermines the utility of that very cap. Finally, it is patently unfair for PCS licensees, and especially small businesses, that have already spent billions of dollars under the reasonable assumption that no new 2 GHz

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10 47 U.S.C. § 332(c)(1) (FCC is required to achieve regulatory parity among similarly situated mobile service providers).

11 In Cincinnati Bell, the court noted that "Section 309(j)(3) confers authority upon the FCC to place certain restrictions on the bidding process in order to ensure a wide variety of applicants are able to meaningfully participate . . . ." Cincinnati Bell v. FCC, 69 F.3d 752, 761-62 (6th Cir. 1995).

spectrum would be soon released to find that the Commission would now permit only the wealthiest few licensees to aggregate 2.3 GHz spectrum at will.

E. Transmit Power Limit

Omnipoint believes that the proposed maximum effective radiated power limit of 2,000 watts at 2.3 GHz could be viewed as a threat to public safety and human health. Because 2.3 GHz is also roughly the same frequency band used in conventional microwave ovens in order to excite water molecules and heat food, the proposed 2,000 watt limit could well pose significant risks of injury to the public and damage of property. Omnipoint recommends that the power limit for 2.3 GHz transmitters be limited to no more than a few watts e.r.p., if used terrestrially.

III. 2.3 GHz Band Auction Rules Should Be Modified To Ensure Small Business Participation

Omnipoint recognizes that the Appropriations Act puts considerable pressure on the Commission to close the auction and collect the revenues by September, 1997. The NPRM (at ¶¶ 13 n.27, 63) mistakenly suggests that the need for a quick auction requires for the Commission to limit the number of 2.3 GHz licenses and restrict auction preferences for small businesses. Omnipoint respectfully submits that the important policy objectives for licenses that promote wireless Internet access and for small business incentives need not be sacrificed for the sake of an expeditious auction and the collection of auction revenues. We also note that Section 309(j) prohibits the Commission from considering the expectation of federal revenues when it makes decisions concerning the "area designations and bandwidth assignments." 47 U.S.C. § 309(j)(7)(A) & (4)(C). Thus, this proceeding should not attempt to meet budgetary expectations for a multi-billion dollar auction or design 2.3 GHz licenses to attract large, well-capitalized companies for a lucrative auction. Rather, the focus should be on what wireless services will best serve public needs, and on the impact that the 2.3 GHz allocation will have on all wireless entrants.

Omnipoint also believes that the Commission's obligations under Section 309(j) require adoption of auction incentives, such as bid discounts, for small business participation in the 2.3 GHz auction. *See* NPRM at ¶ 63. While the Appropriations Act forecloses installment payment plans, the Commission could easily offer small businesses the net present value equivalent of the small business installment plan with (a) a 25% bid discount, and (b) an additional 20% off the net bid price as a factor that is roughly equivalent to the time value of money under the broadband PCS Block F installment plan. In this way, the Commission can both collect the revenue upfront and meet its goals of fostering small business participation.

IV. Nationwide Licenses Would Undermine Competition in Wireless Services

Omnipoint believes that nationwide 2.3 GHz licenses would contravene the public interest in several ways. First, nationwide licensing would allocate spectrum to only one, or few, bidder(s) in the auction.[12] Such licensing was considered and rejected in the context of broadband PCS in favor of MTAs and BTAs that provide more opportunity for a number of competing carriers. Moreover, one licensee is likely to mean that one business plan, and a single service application, would permeate 2.3 GHz, contradicting the objectives for a wide array of innovative 2.3 GHz offerings. NPRM at ¶ 9. By contrast, several independent licensees will permit competing business plans, and alternative services for consumers, to flourish.

Moreover, nationwide licensing is inherently unfair for existing CMRS providers, and especially new entrant PCS operators. For example, national licensing of a single 2.3 GHz license would prevent any small business with even a single Block C license from participating the 2.3 GHz auction. Meanwhile, some large telecom companies that avoided the risks of the

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12 While the Commission has proposed franchising, spectrum disaggregation, and geographic partitioning as methods for re-allocating the spectrum to service providers, reliance on these untried ideas is speculative, at best.

PCS auction process could now, only after the PCS auction process has played out, establish a national footprint through an auction that is unlikely to attract a host of competitive bidders.

As it did with broadband PCS, the Commission should permit the competitive auction process to dictate whether a single licensee obtains nationwide coverage. Second Report and Order, GN Dkt. No. 90-314, 8 FCC Rcd. 7700, ¶ 78 (1993) (regional or nationwide coverage could be achieved through aggregation of contiguous service areas).

Conclusion

The 2.3 GHz band holds great promise to serve the public interest with alternative wireless access to the Internet and WLL providers. The Commission is also obligated to auction the 2.3 GHz band in a manner that promotes small business in telecommunications. Omnipoint urges the Commission to uphold these public interest objectives by adoption of Omnipoint's band plan, which will promote the introduction of flexible, affordable data services.

Respectfully submitted,

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Date: December 4, 1996