Space Data® CORPORATION

Post Office Box 1866
Chandler, AZ 85244-1866
TEL (480) 722-2100
FAX (480) 403-0021
www.spacedata.net

September 19, 2008

Via Electronic Filing

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: **EX PARTE**
WT Docket No. 06-150; PS Docket No. 06-229

Dear Ms. Dortch:

On September 18, 2008, Greg Rohde, President of E-Copernicus, and/or Cheryl Tritt of Morrison & Foerster LLP, on behalf of Space Data Corporation ("Space Data"), left or exchanged messages with Bruce Gottlieb, Legal Advisor on Wireless and International Legal Issues to Commissioner Michael Copps; Renée Crittendon, Legal Advisor on Spectrum and International Issues to Commissioner Jonathan Adelstein; Wayne Leighton, Special Advisor on Wireless and International Issues to Commissioner Deborah Taylor Tate; and Angela Giancarlo, Chief of Staff and Senior Legal Advisor on Wireless and International Issues to Commissioner Robert McDowell; regarding the above-referenced proceedings. In addition, Mr. Rohde spoke with Commissioner Adelstein by phone regarding the above-referenced proceedings. All communications occurred prior to the release of the Commission's sunshine notice for its September 25, 2008 Open Meeting.

The Space Data representatives noted the proposals outlined in its ex parte (attached) that was filed in the above referenced docket on September 17, 2008, and encouraged the Commission to incorporate them in the Third Further Notice of Proposed Rulemaking in the 700 MHz auction proceeding that will be considered at the Open Meeting.

Pursuant to Section 1.1206(b) of the Commission's rules, an electronic copy of this letter is being filed with the office of the Secretary. If you have any questions regarding this notification, please contact the undersigned.

Very truly yours,

/s/ Gerald Knoblach

Gerald Knoblach
Chief Executive Officer
Space Data Corporation

Attachment

cc: Commissioner Jonathan Adelstein
Bruce Gottlieb
Renée Crittendon
Wayne Leighton
Angela Giancarlo

Space Data® CORPORATION

Post Office Box 1866
Chandler, AZ 85244-1866
TEL (480) 722-2100
FAX (480) 403-0021
www.spacedata.net

September 17, 2008

Via Electronic Filing

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: **EX PARTE**
WT Docket No. 06-150; PS Docket No. 06-229

Dear Ms. Dortch:

Space Data Corporation ("Space Data") supplements its comments filed in the above-referenced proceeding to address certain proposals raised in the record and possible approaches that the Commission may consider in refashioning the 700 MHz auction rules. Public safety groups and the American public can benefit fully from a shared nationwide, interoperable public safety and private broadband network (the "Shared Network") only if the D Block licensee(s) can economically acquire and construct the Shared Network. The proposals below would encourage additional participation in the D Block auction, facilitate economic build out of rural areas that may otherwise go unserved, and remove unnecessary financial and technical barriers that might impede potential bidders' participation.

I. BIDDING CREDITS FOR ADDITIONAL AND FASTER BUILD OUTS

Space Data urges the Commission to offer bidding credits to stimulate participation in the D Block auction and promote construction of the Shared Network. Space Data continues generally to support the bidding credit rules outlined by Sprint Nextel Corporation ("Sprint Nextel"),[1] but in light of the Commission's reported consideration of a regional or state-level licensing regime, the bidding credit relating to build out milestones should be modified.

As Space Data explained in its Reply Comments, additional bidding incentives would help offset the costs associated with building out the Shared Network to meet public safety standards. Space Data, an active and successful participant in the Commission's tribal land bidding credit program, has learned first hand that acquiring funding for spectrum requires a sound business plan and that bidding credits can be a deciding factor for investors.

[1] *See* Reply Comments of Space Data Corporation, WT Docket No. 06-150; PS Docket No. 06-22, at 13 (July 7, 2008) ("Space Data Reply Comments").

The availability of bidding credits is particularly important in rural areas where it is more costly to construct a network than in urban areas. If the D Block spectrum is allocated on a regional or state-level basis as several commenters have suggested, bidding credits become even more critical to provide build out incentives. Specifically, a business plan to provide service to a particular region's urban areas may not garner sufficient financing to cover the costs of building out near term the rural portions of the region. As Space Data noted in its Reply Comments, Sprint Nextel is correct that the Commission has authority to apply these bidding credits to the 700 MHz D Block.[2]

Specifically, as Sprint Nextel suggested, the D Block licensee would be required to satisfy a minimum build out requirement of a certain percentage of the population of its licensed area by the end of the license term. Sprint Nextel proposed that the licensee would receive up to a 10 percent bidding credit for committing to cover a higher percentage of the licensed area's population, and a 15 percent bidding credit for committing to cover an even higher percentage of the licensed area's population, by the end of the license term.[3] As further discussed below, Space Data agrees with this proposal.

The Commission, however, also should offer incentives for expedited network build out. Specifically, five percent bidding credits could be awarded when a licensee satisfies the requisite build out requirements ahead of the required build out milestones. For example, Table 1 shows how these bidding credits would be applied assuming a licensee provides expedited coverage to certain percentages of the population by the end of the fourth, 10th and 15th years. In addition, as shown in Table 2, the Commission should award additional five percent bidding credits to licensees that build out their licensed areas beyond the third milestone by the end of the 15th year.

II. COMBINATORIAL BIDDING FOR RURAL AREAS

If the Commission offers D Block auction bidders the option to bid for licenses at a regional or state level, it should allow limited combinatorial bidding to ensure that the least densely populated states have an equal chance for achieving maximum build out of the Shared Network. Specifically, the Commission should allow bidders to group several of the large, least densely populated contiguous states, i.e. Idaho, Montana, Wyoming, North Dakota, South Dakota, Nebraska, Nevada, Utah, and Kansas as one package of licenses. These states are the least densely populated states in the continental United States (with the exception of New Mexico, which is not contiguous). As commenters have demonstrated, even building out the

[2] *See id.*

[3] Sprint Nextel suggested a minimum build out of 95 percent of the population, with 10 and 15 percent bidding credits for committing to cover 98 and 99.7 percent, respectively, of the population, by the end of the license term.

Shared Network to cover 99 percent or more of the U.S. population leaves the vast majority of these rural and lightly populated states' territories without coverage.[4] The lack of service to vast geographic areas raises significant public safety concerns for the more than 12 million citizens who live in these sparsely populated rural states.

Space Data previously explained that unique economic and strategic differences between urban and rural markets and service providers – particularly those utilizing wide area technologies that have larger service footprints than traditional terrestrial networks – could contribute to a viable business plan that focuses primarily on serving rural markets.[5] Using combinatorial bidding in this scenario would allow service providers to bid on a package of rural licenses without risking their ability to execute a business plan if they fail to win critical licenses in the region. Rural areas can be built out economically only if the network covers a threshold number of people (often concentrated in more dense urban areas). This package would provide a sufficient number of potential customers to support a financial model to build out the licensed area. By applying combinatorial bidding to these rural states, the Commission would create an environment where a bidder can combine rural areas that together have sufficient population to make a business case to potential investors and creditors and allow for the more economic and maximum construction of the Shared Network. This combinatorial bidding approach would encourage additional bidders to participate in the D Block auction and facilitate aggressive economic build out of sparsely populated rural areas that otherwise would go unserved. These uncertain economic times make it even more important that the Commission assist in finding novel approaches to the auction rules for the D Block that will help successful bidders finance their build out.

III. D BLOCK RULES SHOULD NOT IMPOSE UNNECESSARY COSTS OR SPECIFY A SINGLE APPROACH FOR ACHIEVING NETWORK RELIABILITY

The Commission should ensure that its D Block rules do not impose unnecessary costs upon service providers to "harden" sites in a specific way if they can achieve the same level of network reliability through other, more economic means. For example, the Commission previously proposed specific D Block requirements for the number of hours of backup power or days of generator fuel that must be stored at each terrestrial site.[6] Existing and potential

[4] *See, e.g.*, Comments of the Public Safety Spectrum Trust Corporation, WT Docket No. 06-150, PS Docket No. 06-229, Attachment D (June 20, 2008).

[5] *See* Comments of Space Data Corporation, WT Docket No. 06-150; PS Docket No. 06-22, at 12-16 (June 20, 2008) ("Space Data Comments"); Space Data Reply Comments at 3-9.

[6] *See Service Rules for the 698-746, 747-762 and 777-792 MHz Bands Implementing a Nationwide, Broadband Interoperable Public Safety Network in the 700 MHz Band*, 23 FCC Rcd 8047, Appendix (2008).

innovative technologies, however, do not or may not require back-up power or fuel, and might be used in conjunction with the terrestrial network to ensure network reliability.[7] Accordingly, D Block licensees should be exempted from specific hardening requirements, provided that they can demonstrate that they have implemented sufficient operational redundancies to provide an equivalent level of network reliability.

IV. TECHNICAL RULES MUST BE TECHNOLOGY NEUTRAL

The Commission should ensure that its rules provide the D Block licensee and public safety broadband licensee with the flexibility to use a myriad of innovative solutions, including wide area technologies, to build out the Shared Network. The existing 700 MHz rules set forth certain power limits based upon the antenna height of a base station.[8] The 700 MHz rules also define a "base station" as a "land station… not intended to be used while in motion."[9] Although certain wide area technologies may not be land-based like traditional terrestrial towers and will operate while in motion (including Space Data's SkySite platforms), they perform the same functions as conventional fixed base stations.

Accordingly, the 700 MHz rules should be drafted to allow the introduction of innovative, wide area technologies.[10] Specifically, the FCC should: (1) amend the definition of "base station" in Section 27.4 of the rules to include "technologies that perform the same functions as land stations," and/or (2) provide that any technical requirements in Sections 27.50 – 27.70 that apply to base stations or fixed towers similarly apply to non-traditional technologies that perform the same functions as base stations or towers. These amendments would ensure that a licensee can use innovative technologies to economically and efficiently build out the Shared Network while also restricting the licensee to the power limitations set forth in the rules.[11]

---

[7] For example, Space Data's wide area SkySite platforms could not carry additional fuel, but additional SkySite platforms could be launched rapidly to fill in for any failed equipment. SkySite platforms also may rely on solar power. In addition, the requisite network reliability could be achieved through a combination of towers and SkySite platforms. Space Data Comments at 11-12.

[8] *See* 47 C.F.R. § 27.50.

[9] 47 C.F.R. § 27.4 (definitions for "base station" and "land station").

[10] The Commission previously applied the base station requirements in the narrowband PCS context to Space Data's wide area technology. *See Petition for a Declaratory Ruling, a Clarification or, in the Alternative, a Waiver of Certain Narrowband Personal Communications Services (PCS) Rules as they Apply to a High-Altitude Balloon-Based Communications System*, 16 FCC Rcd 16421 (WTB 2001).

[11] For example, Section 27.50 sets forth specific power limits for base station antennas above 1000 feet.

Pursuant to Section 1.1206(b) of the Commission's rules, an electronic copy of this letter is being filed with the office of the Secretary. If you have any questions regarding this notification, please contact the undersigned.

Very truly yours,

/s/ Gerald Knoblach

Gerald Knoblach
Chief Executive Officer
Space Data Corporation

Table 1: Early Build Bidding Credit Table

	Milestone		
Population Density of Region:	**4 yr**	**10 yr**	**15 yr**
Less than 100 ppl./sq. mi:			
Minimum Build Out = No Credit	*40%*	*75%*	*90%*
One period early = 5% Credit	75%		90%
One period early = 5% Credit	40%	90%	
Two periods early = 10% Credit	75%	90%	
Three periods early = 15% Credit	90%		
Between 100 to 500 ppl/sq.mi.			
Minimum Build Out = No Credit	*40%*	*75%*	*94%*
One period early = 5% Credit	75%		94%
One period early = 5% Credit	40%	94%	
Two periods early = 10% Credit	75%	94%	
Three periods early = 15% Credit	94%		
More than 500 ppl/sq.mi.:			
Minimum Build Out = No Credit	*40%*	*75%*	*98%*
One period early = 5% Credit	75%		98%
One period early = 5% Credit	40%	98%	
Two periods early = 10% Credit	75%	98%	
Three periods early = 15% Credit	98%		

Table 2: Added Build Out Bidding Credit Table

	Population Build Out at 15 Years			
Population Density of Region:	**90%**	**94%**	**98%**	**99.30%**
Less than 100 ppl./sq. mi:	0%	5%	10%	15%
Between 100 to 500 ppl./sq.mi.:	[redacted]	0%	5%	10%
More than 500 ppl./sq.mi.:	[redacted]	[redacted]	0%	5%