Before the

Federal Communications Commission

Washington, D.C. 20554

In the Matter of	)	
Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules	)	WT Docket No. 99-168
Carriage of the Transmissions of Digital Television Broadcast Stations	)	CS Docket No. 98-120
Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television	)	MM Docket No. 00-83

To: The Commission

COMMENTS OF SPECTRUM EXCHANGE GROUP, LLC

Spectrum Exchange Group, LLC ("Spectrum Exchange") hereby submits these comments in the above-captioned proceeding. Spectrum Exchange presents an outline of a voluntary secondary auction that it plans to run with Allen & Company Incorporated ("Allen"), and otherwise discusses issues on which the FCC sought comment in its recent *Further NPRM*.[1] FCC actions along the lines suggested in the *Further NPRM* will both facilitate the voluntary clearing of the 700 MHz band and accelerate the transition to DTV, doubly serving the public interest.

[1] *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, FCC 00–224, WT Docket No. 99–168, CS Docket No. 98–120, MM Docket No. 00–83 (rel. June 30, 2000).

I. BACKGROUND

As the record in this proceeding clearly demonstrates, the potential of the 700 MHz band to produce benefits for consumers is enormous. Because of its location in the electromagnetic spectrum and its excellent propagation characteristics, this band is ideally suited for next generation (3G) mobile or high-speed broadband services. These services will intensify competition for all communication services and yield tremendous benefit to the public, particularly if the services are speedily deployed to their highest value uses.

Spectrum Exchange, www.spectrum-exchange.com, was established with the mission to create value for the public by promoting the efficient exchange of spectrum. Spectrum Exchange was formed by principals of Market Design Inc., www.market-design.com, which since 1995 has designed and conducted numerous high-stake auctions in the telecommunication, energy, and e-commerce industries—in the U.S. and internationally.

Allen & Company is a New York investment bank with special expertise in advising companies in the broadcasting, media and telecommunications industries. Allen is experienced at bringing together and negotiating complex financial transactions between parties in these and other industries. In addition, Allen has advised participants in FCC auctions.

We are pursuing our plans for the 700 MHz band in partnership with Allen. Together, and in close contact with broadcasters, telecommunications firms and the FCC, we are attempting to craft a private market mechanism that resolves the spectrum interference issues while receiving all parties' voluntary participation.

Spectrum Exchange has already commented numerous times in the 700 MHz proceeding. We have presented preliminary versions of our plans for a private band-clearing auction,[2] recommended

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[2] *See* "Opposition of Spectrum Exchange Group LLC to Petitions for Reconsideration," in WT Docket No. 99–168, filed March 10, 2000; *see also* Letters dated December 17 and December 29, 1999 from Kathleen Q. Abernathy and letters dated April 3, April 7 and April 11, 2000 in WT Docket No. 99–168 from Jonathan V. Cohen, counsel to

that the Commission promulgate various rules and language facilitating private market transactions,[3] and advocated that the Commission adopt package bidding for its upcoming sale of 700 MHz licenses.[4] We are grateful to the Commission for its responsiveness to our earlier comments, including its discussion of secondary auctions in the *Further NPRM*,[5] its language facilitating private transactions in the *Memorandum Opinion and Order*,[6] and its adoption of package bidding.[7]

II. A PLAN FOR A SECONDARY AUCTION

In order to accomplish band-clearing of the 700 MHz spectrum, Spectrum Exchange and Allen (hereafter "Spectrum Exchange/Allen") plan to administer a secondary auction for clearing rights.

A. INTRODUCTION: A LINKED AUCTION

The 700 MHz auction presents a fundamental economic problem. A company wishing to provide a new wireless service in the 700 MHz band needs two things: a license from the FCC and the corresponding clearing rights from the incumbent broadcasters. The license and the clearing rights are strong complements; each is worth much less without the other. One can think of the license as a left shoe and the clearing rights as a right shoe. What a company needs is a pair of shoes. The problem is

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Spectrum Exchange, to Magalie Roman Salas, FCC Secretary, regarding *ex parte* presentations made by Spectrum Exchange.

[3] *See* "Opposition of Spectrum Exchange Group LLC to Petitions for Reconsideration," in WT Docket No. 99–168, filed March 10, 2000; "Petition for Rule Making by Spectrum Exchange Group LLC Concerning Rules To Facilitate Clearing of the 746–806 MHz Band," in WT Docket No. 99–168, filed April 24, 2000; and and *ex parte* letter dated May 3, 2000 in WT Docket No. 99–168 from Peter C. Cramton to the Honorable William E. Kennard, FCC Chairman.

[4] *See* CRA–MDI Reports on Combinatorial Bidding; "FCC–SIEPR–NSF Wye Woods Conference: Lessons plus a Simple Proposal," presented by Paul R. Milgrom on May 7, 2000; "Comments of Spectrum Exchange Group, LLC," DA 00–1075, June 9, 2000; "Reply Comments of Paul R. Milgrom," DA 00–1075, June 16, 2000; and *ex parte* communications of Paul R. Milgrom, DA 00–1075.

[5] *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, FCC 00–224, WT Docket No. 99–168, CS Docket No. 98–120, MM Docket No. 00–83 (rel. June 30, 2000), ¶93–103.

[6] *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, FCC 00–224, WT Docket No. 99–168, CS Docket No. 98–120, MM Docket No. 00–83 (rel. June 30, 2000), ¶35-68.

[7] Public Notice, "Comment Sought on Modifying the Simultaneous Multiple Round Auction Design to Allow Combinatorial (Package) Bidding," DA 00–1075, WT Docket No. 99–168 (rel. May 18, 2000), and Public Notice, "Procedures Implementing Package Bidding for Auction No. 31," DA 00–1486, WT Docket No. 99–168 (rel. July 3, 2000).

that the government only owns the left shoe; the right shoe is owned by many different broadcasters. An auction for left shoes is likely to attract little interest unless the winning bidders can be confident that they will be able to acquire the corresponding right shoes. Our clearing auction is designed to do just that. It enables the bidders to bid for a pair of shoes. This is accomplished by linking the clearing auction to the FCC auction. Effectively, a bid in the FCC auction implies a corresponding bid in the clearing auction. As a result, the winner of the FCC license is the winner of the clearing rights.

Linking the clearing auction to the FCC auction maximizes the value of the spectrum by providing an efficient clearing solution. It allows companies to bid for clear spectrum. Companies will not have to guess whether they will be able to clear the spectrum, nor guess what clearing will cost. They simply need to assess what clear spectrum is worth and then bid appropriately in the FCC auction (and the simultaneous clearing auction).

In linking the auctions, the incumbent broadcasters share in the value that they create by agreeing to clear the band. This is appropriate in light of the broadcasters' property right to broadcast in the 700 MHz band. Moreover, letting the incumbents share in the value created is a necessary condition for any voluntary plan. The incumbent broadcasters will participate in a plan only if it offers them at least us much for their clearing rights as they would expect to get from private negotiations with the license winners after the auction. The precise form of the linkage is determined as described below.

By linking the FCC auction and the clearing auction, we directly solve the fundamental economic problem. Bidders are able to bid for pairs of shoes, rather than bidding for left and right shoes independently. We have analyzed and discussed many alternatives and believe our approach to be the best plan currently on the table. For instance, in an unlinked approach such as described in ¶96 of the *Further NPRM*, the bidders bid in both the FCC auction and the clearing auction, but bids in one are not tied to bids in the other. This exposes the bidders to the risk that they may fail to win the clearing rights for the licenses they win, or vice versa. It also introduces new gaming opportunities that increase uncertainty and reduce efficiency. For this reason, economic efficiency favors the linked approach.

B. OUTLINE OF THE AUCTION DESIGN

Spectrum Exchange/Allen will conduct a private secondary auction ("clearing auction") at the same time as the FCC auction. The bidders in the clearing auction are the same parties ("participating bidders") who bid in the FCC auction. Participation in the clearing auction is purely voluntary, but the process is structured so that all of the likely winners in the FCC auction will have an incentive to participate.

Every time a participating bidder places a bid on a license in the FCC auction, a linked bid will automatically be placed in the clearing auction on the encumbering licenses that correspond to that 700 MHz license. A participating bidder who wins a license in the FCC auction also wins the associated clearing rights in the clearing auction, and pays a clearing payment based on its bid in the FCC auction. In greater detail:

- A bidder enters the clearing auction by signing a contract specifying that, each time the bidder submits a bid in the FCC auction, the bidder automatically places a linked bid in the clearing auction.
- Bidders do not bid on the clearing rights for individual television stations. Rather, Spectrum Exchange/Allen will aggregate the clearing rights of individual stations into 12 "clearing rights" which will have the exact same scope as the FCC licenses (e.g., Northeast 20 MHz clearing rights, Pacific 10 MHz clearing rights, etc.).
- Clearing auction bids are determined by a linkage ratio, *R*, that reflects a fixed relationship between money committed to the participating incumbents and money committed to the government. *R* may be either less than or greater than one (1). There will also be some form of a minimum price or reserve price, for example, a fixed minimum, *M*.
- A bidder participating in the clearing auction wins clearing rights corresponding to the licenses that the bidder wins in the FCC auction and is obligated to pay the incumbent broadcasters according to the formula ($R*X+M$), where *R* is the linkage ratio, *X* is the

amount owed to the government, and *M* is the fixed minimum. A bidder who does not win any licenses in the FCC auction wins no clearing rights and pays nothing.

- If a “nonparticipant” (i.e., a bidder in the FCC auction who declines to participate in the clearing auction) wins some of the licenses in the FCC auction, then the corresponding clearing rights are not sold in the clearing auction.

Prerequisite to the clearing auction, incumbent broadcasters in Channels 59–69 are asked to participate in the clearing plan by committing to clear on the following terms:

- Incumbent broadcasters in Channels 59–69 are requested to provide their upfront commitments to band-clear for winners of the clearing auction by May 1, 2002 or 18 months after receiving their final DTV construction permit, whichever is later.
- In return, incumbent broadcasters in Channels 59–69 receive clearing payments equaling their proportionate share of the revenues from the clearing auction. These revenues are allocated among the individual stations in a region in proportion to the population or number of households within their respective grade B contours.
- In the event that a given television market (i.e., designated market area) achieves less than 100% incumbent participation, there are various back-up procedures that can be presented to participants to achieve partial clearance.

C. DETERMINATION OF THE LINKAGE RATIO AND FIXED MINIMUM

The parameters of the secondary auction may be determined in either of two ways. One way to determine the linkage ratio and fixed minimum is simply by discussions among the incumbent broadcasters and prospective bidders. A second way to determine the linkage ratio and fixed minimum is by conducting a “linkage auction” in advance of the FCC auction and clearing auction. A “linkage auction” would be conducted as follows:

- Bidders in the linkage auction are parties who will bid in the FCC auction.

- A bidder participates in the linkage auction by submitting a sealed bid consisting of a linkage ratio, *R*.
- Following the submission of sealed bids, a "winning ratio" is determined that is acceptable to the incumbent broadcasters. All participants who submitted bids greater than or equal to the number determined to be the winning ratio will be designated to be "winners" of the linkage auction. Winners will be contractually bound to participate in the clearing auction as described above, with the linkage ratio, *R*, defined to be the winning ratio determined here.
- The design of the linkage auction will also include the determination of the minimum price or reserve price.

III. A TV EXCHANGE

As an adjunct to the clearing auction, Spectrum Exchange/Allen also stands ready to conduct a TV Exchange. The purpose of the TV Exchange would be to facilitate the relocation of television stations in Channels 59–69 to lower channels. In its simplest form, the TV Exchange is a market-by-market descending-bid auction that will identify stations below Channel 59 that are suitable candidates to clear in place of a station in Channels 59–69. (The descending auction design is already described in ¶94–95 of the *Further NPRM*.) Alternatively, participants in the TV Exchange may come to agreement with relocation candidates through negotiation or other auction mechanisms. By considering all of the potential replacement channels for the channels that need to be vacated, the interference can be resolved at minimum cost and at minimum disruption to over-the-air television viewers.

IV. OTHER ISSUES CONCERNING THE SECONDARY AUCTION

The Commission has requested comment on the legality and desirability of an FCC-conducted secondary auction. Generally speaking, it is inappropriate for public agencies to perform jobs that can be done reasonably and expeditiously by the private sector. In ¶100 of the *Further NPRM*, the Commission has already noted: "We note that the secondary auction proposals discussed above would involve bidding on contractual options, not spectrum licenses, and that the proceeds of the secondary auction would go to TV incumbents rather than to the U.S. government." Given that the clearing rights to be sold are the property of private broadcasters—not the government—and given that Spectrum Exchange/Allen already stands ready to conduct the secondary auction, it would be inappropriate for the FCC to conduct the auction itself. The relevant arguments are familiar to the Commission and were summed up in the separate statement of Commissioner Harold Furchtgott-Roth (approving in part, dissenting in part): "As a threshold matter, I have serious doubts about our statutory authority to run such an auction. We are not Sotheby's, available for hire to auction any communications-related items. Indeed, even with statutory authority, the rationale for FCC intervention is unclear in light of private parties' plans to conduct such auctions. The notion of government usurping a function currently performed by private parties should be an anathema to the Commission."

A second important issue to be raised in this regard is the "Brooklyn Bridge Problem." It is legally risky and poor public policy for the Commission to auction the clearing rights when it also holds the right to approve or deny the necessary waiver requests. If the FCC conducts the auction—and subsequently denies the underlying waiver request for a station to clear—the FCC could be vulnerable to lawsuit for having "sold the Brooklyn Bridge."

V. OTHER ISSUES CONCERNING BAND CLEARING

A. THREE-WAY VOLUNTARY TRANSITION AGREEMENTS

Our plan fully supports and encourages three-way voluntary transition agreements. Three-way agreements are needed whenever the incumbent broadcaster is willing to leave the 700 MHz band, but only if it can relocate to an alternative channel below 59. The TV Exchange described above presents a market-based approach for stations to identify the least-cost way to clear the 700 MHz band. By finding the least-cost clearing solution, the TV Exchange minimizes any temporary loss in over-the-air broadcast. The FCC should establish rules and procedures that facilitate voluntary three-way agreements.

B. EXPEDITED APPROVAL PROCESS

For our global clearing solution to be effective, it is important to resolve uncertainty as completely and quickly as possible. The FCC should adopt an expedited approval process (within 60 days) of all applications filed by incumbent broadcasters participating in the plan. The expedited processing would cover all applications necessary to make an early transition to DTV.

The FCC should establish a schedule for pre-approval of waivers to end over-the-air broadcast. For example, analog stations that anticipate an early transition to digital may apply by January 1, 2001, for pre-approval for clearing. Requests for pre-approval will be acted on by March 1, 2001. Thus, in many cases, the parties will know before the auction begins that substantial clearing will be possible.

C. COST SHARING

We are proposing a global solution for clearing the 700 MHz band. Under our approach the cost of clearing is determined during the FCC auction. This allows the bidders to deduct the clearing cost from their valuations when placing bids in the FCC auction. As a result, the precise division of clearing costs among spectrum users is not critical, so long as it does not adversely impact the decision of a bidder to participate in the plan. Hence, the cost of clearing channels 59-69 can be entirely born by the winners of the commercial spectrum without any efficiency loss, nor without any loss to the winners of the commercial spectrum. Thus, our plan has as an important additional benefit the clearing of both the public safety bands and the guard bands in the 700 MHz band. In addition, channel 59 is cleared, reducing the eventual clearing costs for channels 52–59.

The FCC should consider instituting one possible mandatory cost-sharing rule. In the event that the winner of the 20 MHz license in a given region is able to enter into a comprehensive clearing arrangement with the incumbent broadcasters in that region, the winner of the 20 MHz license shall be able to require the winner of the 10 MHz license in that region to contribute one-third of the clearing cost. This rule prevents the possibility that the winner of the 10 MHz license would attempt to free-ride on the band-clearing efforts of the winner of the 20 MHz license.

D. FACILITATION OF TRANSFER OF CLEARING RIGHTS

In order to facilitate voluntary arrangements for the transfer of clearing rights, the FCC should establish a procedure whereby an incumbent broadcaster can effect a formal transfer of its property rights in Channels 59–69 to the owner(s) of the corresponding 700 MHz license(s).

E. DIGITAL MUST-CARRY

Based on discussions with numerous broadcasters, Spectrum Exchange/Allen believes that the chances of meaningfully clearing analog broadcasters from the 700 MHz spectrum will be further enhanced if the FCC affirms full digital must-carry rights, including DTV multicast channels.

VI. THE DATE OF THE FCC AUCTION

Spectrum Exchange/Allen strongly recommend against any further delay in the 700 MHz auction. Because of the unique propagation characteristics of this spectrum, a successful auction should greatly accelerate the adoption of 3G wireless technology in this country. The United States is at risk of falling seriously behind Asia and Europe with respect to the availability of true wireless broadband service. The recent successful auctions of 3G spectrum in Europe, which sharply contrast with the difficult process that has thus far hampered the sale of 700 MHz spectrum in the U.S., only heighten the danger that the U.S. will lag behind Asia and Europe over the next few years. Spectrum Exchange/Allen believes that it would be a tremendous mistake to allow further delay. The March date gives the FCC, the bidders, and the incumbent broadcasters ample time to establish procedures and resolve uncertainties in the 700 MHz band.

VII. CONCLUSION

The 700 MHz band holds enormous promise. However, this promise can only be realized with a rational plan to facilitate clearing. We have outlined such a plan here. Our plan maximizes the value of the 700 MHz band by promoting efficient clearing. The plan is carefully crafted to obtain participation by as many incumbent broadcasters and prospective bidders as possible. The Commission can encourage the extensive and efficient use of this spectrum by establishing rules and procedures that support our secondary auction and the efficient clearing of the band through private, voluntary agreements.

WHEREFORE, Spectrum Exchange respectfully recommends that the FCC establish such rules and procedures as described above.

Respectfully submitted,

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