

Oral Testimony of Coleman Bazelon, The Brattle Group  
U.S. House of Representatives, Committee on Energy and Commerce  
Subcommittee on Communications, Technology, and the Internet  
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It is an honor to speak here today.

Two years ago I testified before this Committee on the outcome of Auction 73—the 700 MHz auction. At that time I said:

As for the pending decisions about the D Block, the worst thing would be to leave it unused. Freeing it for unrestricted commercial use, configuring it as smaller geographic licenses, and then auctioning it would be best. This would have the benefit of adding more commercial spectrum under flexible license to the band, which would allow a portion of the significant unmet demand from Auction 73 to be met. This approach, of course, would require that the needs of the public safety community be met through other means.

My conclusions then still hold today: The D Block should be auctioned for unrestricted commercial uses and public safety's needs should be directly funded. Consequently, I congratulate the Subcommittee on the draft of the “Public Safety Broadband Act of 2010” for the significant progress it makes in getting the D Block auctioned for commercial uses and directly addressing the issue of funding public safety networks.

Today I would like to discuss revenue that might be raised by auctioning the D Block and other bands of spectrum, and the need for and benefits of additional licensed radio spectrum generally. I am an economist and plan to focus on economic issues. I would also like to be clear that I am not representing anyone here today, but for purposes of full disclosure I do work for carriers, equipment manufacturers and other parties interested in telecommunications policy. My comments today are mine alone.

Forecasting spectrum license auction receipts is not for the faint of heart. Significant uncertainty about future wireless market conditions, as well as details of licensing and auction rules, requires that any forecasts of spectrum values and auction receipts have a wide confidence interval. Nevertheless, a good idea of spectrum value can be derived by observing recent sales, and adjusting for quality differences and changing market conditions.

A well structured, competitive auction of the D Block could be expected to raise \$3 billion to \$4 billion in revenue. In my testimony two years ago, I explained the many problems with Auction 73 and why the final prices in that auction may not have been efficient. In that analysis I calculated that there was unmet demand and an unfulfilled willingness-to-pay of approximately \$1.36 per MHz-Pop. Such a price level would translate into about \$4 billion for the D Block. By my calculations, current spectrum market conditions are likely somewhat depressed and imply a 20% reduction in spectrum values, or a D Block worth about \$3.3 billion. Depending on the timing of a future auction, spectrum prices may rebound with the economy and prospects for future economic growth.

Such estimates assume a well designed, unconstrained auction. Specifically, my calculations assume small license sizes, no package bidding or open access obligations, and unrestricted entry in the auction. Dropping any of those assumptions would be expected to have a negative impact on auction revenues.

I also want to say a brief word about the value of the Discussion Draft's auction of 25 MHz of the 1675 MHz to 1710 MHz band paired with the 2155 MHz to 2180 MHz band. Without knowing the timing or costs of reallocating the federal users from the lower band, it is difficult to put a value on this pair of bands. Nevertheless, a reasonable initial estimate for the value of the spectrum identified in the Discussion Draft would be around \$0.50 per MHz-Pop or \$7.5 billion for 50 MHz of spectrum. Combined with the D Block revenues, the Discussion Draft identifies approximately \$11 billion in revenue from spectrum auctions.

I would also like to say a word about auctions of additional bands of spectrum. In addition to the two bands noted above there are many more bands of radio spectrum that could potentially be licensed. The National Broadband Plan identifies several bands and there are others to consider as well. Decisions about specific allocations and pairing of spectrum bands should consider the full set of potential spectrum bands available for reallocation. Getting additional spectrum licensed will benefit public safety in at least two ways. First, additional competition in the provision of mobile broadband services increases the potential partners for public safety, reducing costs and increasing the range of services they can use. Second, a better connected public is a safer public. Just as the proliferation of cell phones supports public

safety's mission, the increasing use of mobile broadband by the public will further enhance the public safety community's ability to respond to future emergencies.

Finally, as a former CBO Analyst I would like to comment on the scoring of revenue to fund public safety infrastructure and operations. The scorable value of any directed spectrum auction is only the increase in value from the legislation over the baseline revenue estimates from the sale of that spectrum. Consequently, the roughly \$11 billion in potential auction receipts identified in the Discussion Draft will likely have a score of a few billion dollars less.

Thank you.