

DEVELOPMENTS— TELECOMMUNICATIONS

BIDDING FOR BANDWIDTH: THE 700 MHZ SPECTRUM AUCTION

As part the federally mandated switch to digital television, the Federal Communications Commission (“FCC”) has auctioned off part of the 700 MHz radio and television broadcast band. This spectrum of frequencies, which has carried ultra high frequency (“UHF”) television signals for decades, represents one of the last prime strips of broadcast “real estate.” Wireless broadband providers wanted a piece of the spectrum because its signals can travel long distances and penetrate thick walls, which are ideal qualities for a widespread, wireless network. Telecommunications titans AT&T and Verizon emerged as the big winners in this electromagnetic land rush. Verizon grabbed the coveted C-block of the spectrum, though on the condition (proposed by Google) that they must open part of those airwaves to a host of new devices that they will not control.

The anonymous bidding, which began January 24, 2008 and ended March 18, raised a record \$19.6 billion. Unlike most spectrum auctions, the FCC did not release the identity of the bidders until the auction had ended and the winners were determined. Currently used for analog television, the 700 MHz spectrum will become available in February 2009, which is the deadline set by Congress for all television to go digital.

The FCC entertained record-breaking bids for the spectrum despite a lack of interest in the D-block, which comes with the restriction that the buyer must provide services for public-safety agencies and emergency responders. As the only bid was below the FCC’s reserve price, the FCC severed the D-block from the rest of the auction, to be auctioned off at a late date.

Bidding for the 700 MHz band offered smaller competitors a chance to create an alternative “open” broadband network that could compete with the major wireless carriers. The FCC grants auction winners a time-limited license to use a spectrum, but as these licenses are almost invariably renewed, they create continuing advantages for the winning bidders. Google and others had hoped to reduce the cost of broadband delivery by using the 700 MHz band, enabling cheaper Internet access to poor communities: one tower broadcasting on the 700 MHz spectrum could cover an area ten times wider than the municipal Wi-Fi and WiMax networks now being built by Google. By dominating the auction, the nation’s two biggest mobile carriers have deflated the hope of creating a new wireless provider. However, the \$711 million slice of the 700 MHz spectrum won by Frontier Wireless, an open-access advocate and a partner of satellite television provider DISH Network, raises the possibility of a nationwide video network.

Open access advocates envision a wireless network to which any device—be it a cell phone, desktop computer, television, or toaster—would be able to connect. Currently, the big carriers restrict the models of cell phones that can be used on their networks and limit the software that can be downloaded over them.

Google promised to surpass the minimum bid of \$4.6 billion if the FCC would adopt a set of license conditions. As bidding began, the FCC had met only part of Google’s demands, requiring the C-block buyer to make a slice of the spectrum accessible to all mobile devices, using any software to connect. After bidding as high as \$4.71 billion for

the C-block, Google abandoned the auction once bids had safely surpassed the FCC-set minimum to activate the “open access” provision. It thus achieved its primary goal of introducing greater competition in the wireless market without making a winning bid. Verizon must now open at least part of its wireless network to all sorts of new devices and applications. However, some have criticized Google for abandoning its bidding efforts. Critics argue that the lackluster competition, combined with some arcane FCC bidding rules, suppressed demand allowing Verizon to pick up the C-block at a bargain price.