



EDITORIAL COMMENTARY

Putting Economics Above Ideology

The Obama administration rightly embraces property rights to radio spectrum.

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By Thomas Hazlett

In early 2001, the Bush Administration halted plans to make more radio spectrum available for cellphone and other mobile services. Officials believed delaying new license auctions would result in higher prices. And sales delayed until 2006 and 2008 did indeed generate record proceeds -- \$33 billion.

But the lollygagging cost the U.S. economy much more. Denying wireless markets their most important resource, spectrum, reduced competition and stunted the advance of mobile networks.

Scholars have argued against creating such artificial scarcity. In general, wireless rights should be assigned by auction, unleashing spectrum for its highest-valued uses. This view has been embraced by the best and brightest regulators, and every faculty member of the University of Chicago Economics Department.

But not, from 2001 to 2008, by the Federal Communications Commission. Under Michael Powell, President George W. Bush's first FCC chairman, the agency instead focused on bands used by cordless phones and Wi-Fi nodes, devices that use unlicensed spectrum set-asides. Access to these frequencies is permitted without exclusive rights. Congestion is mitigated by power limits and technology mandates; the FCC must approve the radios used.

Republican regulators under Chairman Powell moved aggressively to reorient policy. In 2002, the FCC formally announced its intention to open TV-band "white spaces" for unlicensed use. Another FCC ruling that same year enabled unlicensed "ultra-wide band" (UWB) services. A 2003 order added 255 megahertz of unlicensed spectrum to the 5-gigahertz allocation, while a 2005 decision devoted the 3.65-GHz band to unlicensed Wi-Max.

Today, these decisions provide virtually no social benefit. The FCC hasn't approved a single radio device to use the TV bands, so complicated is the regulatory task of determining how TV stations and low-power radios can share frequencies. UWB has gone nowhere. The economic effect of the 255 MHz supplement is scarcely detectable. Only a handful of U.S. subscribers use the 3.65 GHz unlicensed frequencies.

In short, the Bush-era commission's strategy has flopped. Unlicensed spectrum works for

simple short-range applications such as baby monitors and remote controls, or those that plug into larger networks. But cordless phones and Wi-Fi don't replace telephone systems or Internet service providers.

Wide-area networks, wired or wireless, thrive on private-property rights to radio spectrum. Just as land ownership protects farmers producing valuable crops, the right to exclude creates vast social wealth in networks. More than \$200 billion in fixed capital has been invested by U.S. carriers placing radios (base stations and handsets) into owned spectrum; at least \$200 billion in annual gains are now received by cellular customers. Starving mobile networks of licensed spectrum was penny stupid and pound foolish.

The Bush/Powell policy received glowing endorsements. In a December 2004 article in *Wired* magazine, Stanford (now Harvard) law professor Lawrence Lessig wrote: "When Powell took charge, most thought the FCC would quickly launch massive spectrum auctions But Powell's FCC quickly sabotaged this idea, in part because technologists pushed him to see that spectrum is not like land: that perhaps the best way to allocate spectrum is to share it."

Reality check: In actual markets, the most intensely shared spectrum is licensed. Make a call on your iPhone, and AT&T seeks to accommodate you and 80 million fellow subscribers using the 70-to-90-MHz spectrum that it controls. That many complain about slow downloads and dropped calls is both a product of that sharing arrangement and the bandwidth limitations imposed by policy makers. Service suppliers have strong incentives to efficiently pack more traffic into whatever space they control. Each iPhone or other handset based on GSM (the Global System for Mobile Communications) adjusts 1,500 times per second in order stay linked at the lowest possible power level, making more radio space available for others.

Powell, wrote Lessig, bravely dared "heresy." A Republican, Powell didn't "denounc[e] the party line" on spectrum policy, but "nonetheless set up its demise." This enabled a "fair fight-- 'may the best spectrum model win.'"

The Obama Administration has in effect declared that spectrum-model winner. The FCC's National Broadband Plan, released on March 16, carefully identified the foremost policy challenge: getting additional bandwidth out to mobile networks in the form of licensed spectrum. It found a wireless-data tsunami triggered by the "iPhone effect" -- consumers flocking to innovations with high-bandwidth applications. The market craves more spectrum, more than double its current utilization.

Current FCC Chairman Julius Genachowski and NBP author Blair Levin have cast off communitarian ideology to see through the panacea of a "spectrum commons." They recognize the social need for market allocation, and have made it their priority. In late June, President Obama directed federal agencies to make bandwidth available for new auctions, and a major address by chief economic advisor Lawrence Summers urged policy makers to solve the "spectrum crunch."

The FCC's specific plans are, alas, overly complex. Market competitors, not agency analysts, can most effectively move spectrum from old, low-valued apps, such as TV broadcasting, to emerging high-value services, such as mobile broadband. Moreover, FCC plans to regulate high-speed data services through "net neutrality" rules threaten fixed- and wireless-network growth alike. But in re-establishing the case for market-based spectrum deployments, the FCC articulates a serious case for pro-consumer policy reform.

The Bush administration put technology over ideology and produced policies that actually undermined economic progress. In spectrum policy, at least, the Obama administration likewise has set ideology aside, but done much better by pointing the way to policies that spur innovation, unleash bandwidth, invigorate networks, enhance free speech and make Americans wealthier.

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