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## RECLAIMING FEDERAL SPECTRUM: PROPOSALS AND RECOMMENDATIONS

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BRENT SKORUP

The increasing popularity of smartphones, tablets, and other wireless devices which transmit over radio spectrum has generated soaring demand for bandwidth. Spectrum demand continues to grow, but the “greenfields” of unallocated spectrum are gone. Future demand will have to be satisfied by redeploying spectrum from current users—and the federal government, with its vast holdings of underused mobile bandwidth, is the richest source. So far, reclaiming federal bandwidth has been painfully slow, and each year’s delay results in billions of dollars of social cost and forgone auction revenue.

In a new Mercatus Center study, Brent Skorup examines scholars’ proposals and outlines some best practices for reclaiming federal spectrum to ensure more efficient use. Among the recommendations of the study is a proposal for a GSA-like agency with the authority to sell and lease spectrum to federal agencies. Skorup also recommends a temporary commission to identify excess federal spectrum for auction in the next few years. This independent commission would “BRAC the spectrum” to help rapidly redeploy spectrum to its most highly valued uses. In the long run, spectrum should be treated like any other good or service, and agencies should be required to pay the approximate market price, just as they do for other inputs they use.

To read the entire study, visit “Reclaiming Federal Spectrum: Proposals and Recommendations.”

Exploding consumer demand for mobile broadband services is straining the capacity of wireless carriers. A growing consensus finds that federally held radio spectrum is lightly used and better redeployed for commercial purposes, to accommodate consumer demand for wireless services and foster economic growth.

### ALLOCATION OF RADIO SPECTRUM

- The president and the FCC share spectrum management authority. The president delegates federal spectrum management to the National Telecommunications and Information Administration (NTIA) and the FCC manages spectrum for commercial use. Together they determine whether a spectrum band is federal or nonfederal.
- The FCC has partially adopted the idea that spectrum, like real property, is most efficiently used when in the hands of users who internalize both benefits and costs of deploying the input and who can sell it to parties who value it more highly.

- The NTIA disagrees that the federal government should pay market rates for spectrum and—despite congressional and presidential directives—is reluctant to release spectrum under its management.

Consequently, there is inadequate price information for the efficient use of federal spectrum, and the status quo is stalling government plans to reallocate federal spectrum to productive commercial use in the next five to ten years.

## THE SPECTRUM CONSTRAINTS

While demand outstrips the capacity of mobile broadband networks, the federal government continues to hold an estimated 60 percent of available radio spectrum, including over one-half of the valuable 300 MHz to 3 GHz spectrum.

- Inadequate and incomplete records at federal agencies which use spectrum makes assessing the magnitude of inefficient use difficult.
- According to GAO, federal agencies pay \$122 annually per assignment of spectrum—a tiny fraction of market value. This no-cost arrangement is unique to spectrum and creates no incentive for efficient use.
- President Obama’s 2010 Memorandum requiring the federal government to make 500 MHz of federal and nonfederal spectrum available in ten years for mobile broadband would yield social benefits estimated at over one trillion dollars.

## PROPOSALS FOR RECLAIMING SPECTRUM

The use of federal spectrum can be increased by either clearing federal bands for auction to commercial users or by requiring federal users to share their spectrum.

Clearing federal users to make way for commercial users can be accomplished in four ways, which can also be combined:

1. Give federal agencies a deadline to vacate bands of spectrum and auction primary and secondary rights to use those bands (“overlay licenses”).
2. Charge public agencies fees that mimic market prices, as in the United Kingdom and Australia.
3. Create a temporary commission to “BRAC the spectrum” and determine which bands are redeployed to commercial use in the short term.
4. Transfer federal spectrum to a new GSA-like agency that leases and sells spectrum to federal agencies at approximately market rates to economize on spectrum.

## POLICY RECOMMENDATIONS

Policymakers have to address the short-term issue of process reforms to quickly reclaim lightly used federal spectrum and the long-term goal that federal users pay a market price for their valuable spectrum.

- A BRAC-like spectrum reform agency should be established with the power to discover federal and state agencies using spectrum and compel them to vacate the bandwidth.
- Congress could consider the creation of a GSA-like agency to manage the federal spectrum and lease or sell excess bandwidth.
- Federal allocations should be liberalized and priced to provide an incentive to economize.
- With every passing year, we lose tens of billions of dollars of social value and forgone auction revenues. Reclamation of federal spectrum is politically difficult, but we know the best practices to implement. Society and government will benefit when this scarce resource is used more efficiently.

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