Insight

# Spectrum Reauthorization Act of 2023: A Good First Step

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## Executive Summary


- House lawmakers have introduced the Spectrum Auction Reauthorization Act of 2023 to renew the Federal Communications Commission's (FCC) authority to issue spectrum licenses through competitive bidding and address several telecommunications policy priorities.
- Renewing the FCC's authority would allow consumers to reap the benefits of innovative technologies, drive economic growth, and promote international competitiveness by permitting telecommunication service providers to offer services at specific frequency.
- Nevertheless, legislators should be cognizant of potential barriers to progress, such as the bill's provision to grant the executive branch sole discretion to decide on the allocation of federal spectrum for non-federal use, existing tensions between federal agencies and commercial interests, and the reduced incentives to create a larger spectrum pipeline in the future.


## Introduction

Lawmakers on the House Energy and Commerce Committee have introduced the bipartisan Spectrum Reauthorization Act of 2023, which would renew the Federal Communications Commission's (FCC) authority to hold auctions for wireless licenses. The FCC's auction authority expired in March, limiting the agency's ability to hold future auctions and complete auctions that have already occurred but have not been finalized. Despite widespread support for spectrum auctions, previous attempts to extend the FCC's authority failed due to disagreements over the inclusion of a spectrum pipeline — a range of frequencies designated for future auctions — with the reauthorization of the auction

authority. The legislation would attempt to resolve these tensions by giving the executive branch more control over whether spectrum bands used by the Department of Defense (DOD) could be reallocated for commercial use or if re-allocation poses too great of a national security risk.

Returning auction authority to the FCC is critical for stimulating U.S. technological innovation and economic growth as firms need access to spectrum bands with the right characteristics to provide 5G wireless connectivity. Further, auctions generate revenue for the Treasury and can fund critical telecommunications priorities such as efforts to "rip and replace" Chinese hardware from telecommunications infrastructure.

Congress should recognize, however, that this legislation would not guarantee future bands of spectrum are re-allocated and auctioned for non-federal users. Federal agencies that currently occupy mid-frequency spectrum bands suitable for 5G services currently have little incentive to use spectrum efficiently and, rather than cooperate with their agency counterparts to find solutions, may delay attempts to re-allocate specific bands. Specifically, the DOD has claimed re-allocation could pose a risk to national security, but it has not substantiated this claim. Further, because of the way legislative cost estimates are performed, a potentially larger spectrum pipeline may be politically unfeasible until auction authority expires. Lawmakers should be cognizant of these limitations and consider ways to minimize risks and maximize potential benefits by working with relevant agencies and holding them accountable to agreed-upon timelines for studies and decisions.

**Legislative Specifics**

The bill's primary focus is renewing spectrum auction authority for the FCC. On March 9, 2023, the FCC's auction authority lapsed for the first time since Congress delegated such authority to the agency in 1993. The bill would grant the FCC the authority to hold competitive auctions to license bands of spectrum as well as award licenses from auctions held previously until September 30, 2026.

Previous attempts to renew this authority have failed, in part because specific radio frequency bands that would be up for auction would be designed for exclusive, high-power 5G use, particularly in the 3.1–3.45 GHz band. That band is currently occupied by the DOD and used for radar systems, but some argue the band is underutilized and these operations could be shifted to other bands to make room for greater commercial use. Rather than requiring the band be auctioned, the legislation directs the DOD to produce a study on the feasibility of re-allocating the band for commercial use generally and allows the executive branch to maintain control of the band if the White House deems it necessary for national security.

The bill would, however, begin to create a new spectrum pipeline for commercial use. The legislation stipulates that, no later than June 15, 2025, the assistant secretary of the Department of Commerce shall produce a feasibility assessment of making available spectrum for non-federal use, shared federal and non-federal use, or a combination in the bands of frequencies between 4400–4940 MHz and between 7125–8500 MHz. This report would include an estimate of the cost to covered agencies to make particular bands available for non-federal use or shared use as well as consider if mobile or fixed terrestrial use would result in harmful interference to an affected federal entity.

Beyond designating bands for auction, reauthorization also raises debate over how the money will be spent. First, the Spectrum Reauthorization Act would allocate funding for telecommunications providers to "rip and replace" components from Huawei and ZTE – Chinese telecommunications firms that have been deemed a national security risk – from their networks as required by federal law. It would also establish criteria for training and grant funding to support the rollout of next generation 911, an internet protocol-based system that will replace the current analog 911 infrastructure and establishes criteria for grants as part of the Minority Serving Institutions Program. Finally, the legislation would provide support for the deployment of middle mile infrastructure.

**Benefits of Renewing Auction Authority**

Renewing the FCC's auction authority would benefit consumers, industry, and government. Competitive auctions used to re-allocate spectrum for commercial use powers innovative technologies that improve consumer welfare and drive economic growth, generate auction revenues for deficit reduction and other policy priorities, and help the United States remain competitive in the telecommunications sector.

Designating more spectrum for commercial use would allow more Americans to access services such as telemedicine, AI-powered tutors and distance learning, next-generation technologies such as driverless cars, and unmanned aerial vehicles. In the rural context, expanded wireless connectivity would bolster smart agriculture technologies such as fertilizer drones, smart tractors, and precision agriculture. These services will have significant impact on the economy, and the Boston Consulting Group estimates the 5G services will generate between $1.3–1.7 trillion in U.S. economic growth by 2030. Shared models could provide significant benefits as well, as illustrated by researchers examining the impact on device deployment and access following the rollout of Citizens Broadband Radio Service in the 3.55–3.7 GHz band.

Further, renewing auction authority would allow Congress to fund the critical telecommunications policies. Spectrum auctions have raised more than $258 billion in

revenue for the federal government since they began in 1993. The recent 2.5 GHz auction, for example, raised $427 million in revenue for the Treasury. The legislation would allocate revenues for the general fund of the Treasury, deficit reduction, cover relocation costs for federal entities, and help sustain the FCC and the National Telecommunications and Information Administration's borrowing authority.

Finally, the lapse of spectrum authority puts the United States at a disadvantage compared to its international counterparts. Compared to its competitors, particularly China, the United States trails in allocating spectrum for non-federal use. Failing to allocate spectrum for commercial purposes in a timely manner could lead firms to develop and introduce new technology in other nations that do. Further, the World Radio Conference (WRC) will convene this November in Abu Dhabi. If the United States cannot allocate spectrum effectively at home, the American delegation will be in an awkward position when advocating for its preferred positions on global standards and future WRC agenda items.

**Even with Renewal, Obstacles Remain**

Even if the legislation were to pass, the decision on what happens with the 3.1–3.45 GHz band would lie with the White House. The Infrastructure Investment and Jobs Act (IIJA) allocated $50 million for the DOD to conduct a report on the feasibility of leaving or sharing the 3.1–3.45 GHz band. This report has not been released, and the Spectrum Auction Reauthorization Act would require publication by September 30, 2023. Additionally, the proposed legislation would require the DOD and relevant agencies to collaborate on a report to identify 350 MHz of spectrum in the 3.1–3.45 GHz band for re-allocation and submit this report to the president by Jun 15, 2025. If the DOD believes that re-allocation poses an "unacceptable risk to national security," it must inform the president and allow him to make the final decision. Ultimately, the fate of the 3.1–3.45 GHz band would be decided by the White House, potentially renewing auction authority but leaving the FCC without any spectrum to auction.

Lawmakers would also be remiss if they did not consider the historical difficulty of reallocating spectrum from federal to non-federal use. The FCC has never seen its auction authority lapse. Meanwhile, the DOD has not released its own study on the feasibility of moving out of the band or enacting a sharing regime. The IIJA requires the report be published no later than August 15, 2023, but DOD officials have testified they have until September 30, the date the reauthorization bill offered to placate concerns about timing. The DOD is quite likely disregarding the law as written. Certain members of Congress have derailed previous attempts to renew authority, stating that more time is needed to study the issue. Research has shown that federal users of spectrum have little incentive to efficiently use and manage their holdings under the current governance model. By passing the

Spectrum Reauthorization Act of 2023, legislators would set a firm deadline for the DOD and other parties to finalize their reports and prevent further delays – but wouldn't resolve these tensions outright.

Because of these tensions, the bill's lack of a robust spectrum pipeline will likely mean that the FCC will not actually conduct any auctions for the next three years. A key issue for Congress is designating specific bands for reallocation, and for the duration of this extension, Congress is unlikely to have the political capital to pass a standalone pipeline bill. Without establishing a spectrum pipeline, the United States will continue to fall further behind its rivals and allies when allocating spectrum, putting its economic and national security in jeopardy. The bill does, however, begin the process of evaluating bands for a future pipeline, meaning that when auction authority is revisited in three years, a robust pipeline can be attached to a more significant extension. While this is not the best outcome, it is an important first step toward future spectrum auctions.

**Conclusion**

The bipartisan Spectrum Reauthorization Act of 2023 is an important first step in re-asserting the United States' role as a leader in wireless communication innovation, investment, and governance. Renewing the FCC's auction authority is vital to promoting technological innovation in the United States, ensuring consumers can reap the benefits of new services, and reviving the U.S. role as a global leader in the telecommunications sector. Policymakers must remember, however, that while this legislation represents an important first step in promoting American telecommunication interests, potential barriers to progress remain. Looking ahead, Congress and relevant federal agencies should prioritize funding studies and research to identify ideal spectrum bands for re-allocation, a critical step in developing a robust spectrum pipeline.