CSIS Finds U.S. Under Threat from China's Licensed Spectrum

A series of recent reports from the Center for Strategic and International Studies (CSIS) highlights how U.S. 5G and spectrum leadership is critical to our economic competitiveness and national security. CSIS is a bipartisan, nonprofit policy research organization dedicated to defining the future of national security, and their interest in spectrum underscores the security implications of falling behind on wireless leadership.

Lack of Spectrum Risks U.S. Economic and National Security

"But the United States lags far behind the rest of the world in allocations of the spectrum needed for 5G. This undercuts its advantages in the competition for technology leadership, global influence, and national security."

Chinese Spectrum Leadership Means Wireless Leadership

"In five years, China is expected to lead the world, with up to 1160 megahertz (MHz) of mid-band spectrum available for commercial 5G. Further, China is aligning with other countries to harmonize their spectrum allocations with its own. Countries that harmonize spectrum gain larger market shares for equipment designed to use specific frequencies and benefit from greater and more versatile performance. China knows this and is acting accordingly."

Chinese Tech Leadership Will Follow—Threatening U.S. Security

"Consider the threat to the [U.S.] of a TikTok or Huawei equivalent 'national champion' dominating every key sector... including those related to weapons and force projection, such as quantum computing, AI, and cyber operations. There are no weapons, technology bans, or mitigation possibilities that could adequately defend U.S. security interests in such a scenario."

System of Shared Benefits Encourages Spectrum Reallocation

"[A]ll parties involved benefit when the U.S. government (1) makes discerning decisions to open spectrum to commercial licensed use, (2) applies proceeds from license auctions to financially support government agencies in the transition, and (3) carefully coordinates across agencies and pertinent industry stakeholders."

U.S. Spectrum Shortage Can Be Solved By:

1. "Restor[ing] spectrum auction authority to the [FCC] immediately and tak[ing] near-term steps to free up commercial licensed spectrum in the lower [3 GHz]."
2. "Develop[ing] a roadmap for identifying additional mid-band spectrum for wide-area 5G and operationaliz[ing] that roadmap with specific deadlines and concrete plans for reallocation."
3. "Amend[ing] existing statutory authorities to clarify and ensure that funds from spectrum auctions will compensate incumbent users for modernization and reallocation…"
4. "In spectrum bands where sharing is necessary, use proven 'static' spectrum sharing models that drive scale … and provide wide-area coverage …"

CSIS EXPERTS

James Andrew Lewis

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KEY RESEARCH

- **Spectrum Allocation for a Contest with China**
- **Modernizing Spectrum Allocation to Ensure U.S. Security in the Twenty-First Century**
- **The National Security Benefits of Reallocating Federal Spectrum for 5G**

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