July 30, 2026

Senator Deb Fischer
Chairwoman
Subcommittee on Telecommunications and Media
Senate Committee on Commerce, Science and Transportation
254 Russell Senate Office Buildings
Washington DC 20510

Senator Ben Luján
Ranking Member
Subcommittee on Telecommunications and Media
Senate Committee on Commerce, Science and Transportation
254 Russell Senate Office
Washington DC 20510

Re: Hearing on "Intelligent Networks: Powering Artificial Intelligence and Transforming Communications" before the Committee, July 30, 2026

Dear Chairwoman Fischer and Ranking Member Luján,

Spectrum for the Future is a diverse coalition of innovators, anchor institutions, and technology companies using shared licensed spectrum such as the 3.5 GHz CBRS to further America's wireless technology leadership. As the Committee examines how the United States can maintain its leadership in artificial intelligence ("AI"), Spectrum for the Future encourages Members of the Committee to advance policies that preserve the Citizens Broadband Radio Service ("CBRS"), including maintaining current power levels, and expanding access to spectrum for the Private 5G deployments that enable AI.

We applaud the Committee's efforts in holding this hearing and write to amplify the hearing record in support of extending American leadership in AI, particularly as it relates to 1) the use of private mobile networks as a critical communications layer for the implementation of AI by American factories, ports (air and sea), farms, warehouses, and industries broadly, and 2) AI-based innovations in the dynamic management of radio frequency ("RF") spectrum. As a direct result of CBRS innovations, the United States is the global leader in both private mobile networks and dynamic spectrum management. We urge the Committee to leverage and support this leadership as AI becomes increasingly critical to the American economy, national defense, and technological innovation.

<u>CBRS Private Networks enable AI Deployment</u>

American industry, businesses, and the military are implementing advanced AI services with CBRS-based private mobile networks as the foundation. According to an ongoing series of reports from the Global

mobile Suppliers Association ("GSA"), the United States leads the world in private mobile networks due to the availability of CBRS spectrum.[1] The GSA report further notes that CBRS is the leading spectrum band globally for the deployment of private mobile networks. CBRS supports both Private LTE ("pLTE") and Private 5G ("p5G") today and will support Private 6G ("p6G") when it comes to market.

AI services enabled by CBRS private network communications include Digital Twins, Computer Vision, Automated Monitoring, and Route Optimization. A few examples:

- John Deere uses AI to model Digital Twins of its manufacturing facilities utilizing CBRS-connected sensors, optimizing the layout of its production lines and proactively scheduling machine maintenance in advance of failures.[2]
- The U.S. Navy has harnessed AI Computer Vision to analyze the video from CBRS-connected high-resolution rapid imaging devices of P-8 Poseidon aircraft engines, reducing inspection times by almost 95%, from 4 hours to 15 minutes, greatly improving operational availability.
- Miami International Airport utilized its CBRS private network to deploy a next generation perimeter intrusion detection system (PIDS), a cutting-edge AI security technology that identifies and responds to potential airport perimeter breaches in real-time.[3]
- The U.S. Marine Corps is not only "first to fight", but was also the first service branch to obtain an Authority to Operate ("ATO") for its Private 5G network covering nearly 1 Million ft^2 of Smart Warehouse space at its logistics base in Albany, GA. Among other uses, AI is utilized to monitor and optimize the routing of CBRS-connected forklifts and robots in the Automated Storage and Retrieval System (AS/RS) and inventory management process.[4]

These are just a few leading examples of the AI innovation that CBRS is enabling across America.

AI and Dynamic Spectrum Management

Dynamic Spectrum Management (aka Dynamic Spectrum Sharing) represents a uniquely American innovation, combining advanced digital spectrum coordination with equipment designed to optimize the use of spectrum by all users. This approach harnesses the best of American ingenuity, leveraging our leadership in AI and machine learning to dynamically manage spectrum resources in real time.

Key benefits of dynamic spectrum management include:

- Enabling Federal and private sector spectrum sharing without displacing incumbent users, enabling America's national security and domestic economic interests to progress in tandem.
- Accelerating spectrum access for new commercial services without clearing incumbents.
- Ensuring spectrum policies remain innovative, secure, and adaptable to evolving technology.
- Spurring American job creation across a range of industries thru private networks innovation.
- Superior to "command and control" approaches such as those used by the Chinese Communist Party. To underscore this point, in March the Congressional U.S.-China Economic and Security Review Commission recommended that Congress "Increase funding for foundational research on

[1] *Private Mobile Networks June 2026*, Global mobile Suppliers Association, June 2026
[2] *John Deere's private 5G network is 'Never Idle'*, LightReading, April 1, 2025
[3] https://news.miami-airport.com/mia-showcases-new-perimeter-intrusion-detection-system/
[4] https://www.nationalspectrumconsortium.org/api/documents/67a272176b75cbad79eeebb5/data

advanced technologies such as cognitive radio and radar, dynamic approaches to spectrum allocation, and spectrum sharing.[5]

With Dynamic Spectrum Management, the central cloud services coordinating access to spectrum (e.g. the CBRS Spectrum Access System {"SAS"} databases) have comprehensive awareness of what spectrum is or is not available. This makes these spectrum coordinating services "fertile soil" for the development of even more advanced AI capabilities to further optimize spectrum availability and wireless operations. As one example, Federated Wireless has released its *Spectrum AI* platform for CBRS, whose capabilities far exceed the regulatory minimum requirements, and which can increase overall network capacity as much as 5 times.[6]

AI-driven Dynamic Spectrum Management is a testament to the United States' leadership, reinforcing our position as the global leader in both AI and wireless innovation. By prioritizing the extension of this leadership, we will ensure that America's communications infrastructure continues to serve the needs of its citizens, businesses, and government, keeping our nation secure and competitive in the 21st century.

Spectrum for the Future looks forward to working with the Committee on its important initiatives around AI and communications. We welcome the opportunity to provide additional information to the Committee on this important issue.

Very Respectfully,

David A. Wright
Policy Director
Spectrum for the Future
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[5] *China's Management of Electromagnetic Spectrum Resources*, U.S.-China Economic AND Security Review Commission, March 12, 2026

[6] https://federatedwireless.ai/products/spectrum-ai/