

# COHERE TECHNOLOGIES AND BELL CANADA COMPLETE FIRST MAJOR PHASE OF TESTING OF NEW INNOVATIVE SOFTWARE

*Bell Canada first to test successful Single User (SU) and Multiple User (MU) MIMO coordinated scheduling functions via open interfaces in 850MHz band*

SAN JOSE, CA, UNITED STATES, February 26, 2025 /EINPresswire.com/ -- [Cohere Technologies](#), the

“

This trial is an important first step to validate that we can significantly improve existing network capacity with a USM software upgrade on our existing radio access network”

*Mark McDonald, Senior Vice President, Networks, Bell*

innovator of Universal Spectrum Multiplier (USM) software for RAN and Open RAN, today announced the industry’s first successful network field test of software-driven capacity improvement using coordinated scheduling with an existing network, without making changes to existing radios or antennas. USM helps mobile operators improve capacity cost-effectively without requiring further spectrum investment or complex hardware upgrades.

“Thanks to Bell’s leadership, we can now share with the industry that our USM works in both greenfield and brownfield environments,” said Ray Dolan, Chairman and

CEO of Cohere Technologies. “In the coming months, we will work together to validate scalability in a live commercial network as the final step before commercialization.”

“This trial is an important first step to validate that we can significantly improve existing network capacity with a USM software upgrade on our existing radio access network,” said Mark McDonald, Senior Vice President, Networks, Bell. “By relieving network congestion in key spectrum bands, we can improve the customer experience and the value of our existing network assets.”

The field testing took place in December 2024 and January 2025 in a production network field test environment near the Bell technology labs in Mississauga, Ontario, part of the greater Toronto metropolitan area in Canada. The outdoor trial was conducted using mobile devices connected to Bell’s 850MHz spectrum band (FDD), leveraging the 5G standalone network. Cohere’s USM software, located on a server next to the gNodeB, conducted coordinated scheduling with a third-party base station to pair many single user (SU) devices to enable MU-

MIMO capacity improvement of existing resources whenever possible.

Universal Spectrum Multiplier (USM) operates as an advanced wireless optimization system built on innovative Delay-Doppler channel modeling. The system's cloud-based architecture enables function disaggregation and multi-site network visibility, supporting both 4G and 5G networks in FDD and TDD configurations. USM integrates with multiple base station layers to enable FDD MU-MIMO scheduling and beam forming capabilities that is driven by a machine learning capability at the heart of the USM. The USM leverages massive amounts of Delay-Doppler channel and E2SM-LLC API data to understand long-term traffic flows and patterns, enabling operators to dynamically adjust capacity and coverage based on actual usage.



[Bell Ventures](#), Bell's corporate venture capital initiative, is an investor in Cohere.

#### About Cohere Technologies

Cohere is the innovator of Universal Spectrum Multiplier (USM) software for 4G, 5G, and Multi-G. USM improves mobile networks by 50% or more in any FDD and TDD spectrum band. Cohere is the creator of the Orthogonal Time Frequency Space (OTFS) wireless system since 2011 and is headquartered in San Jose, Calif. (USA). Website: [www.cohere-tech.com](http://www.cohere-tech.com)

Ronny Haraldsvik

Cohere Technologies

[ronny.haraldsvik@cohere-tech.com](mailto:ronny.haraldsvik@cohere-tech.com)

Visit us on social media:

[X](#)

[LinkedIn](#)

[YouTube](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/789012423>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire,

Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.