Neutral Host Network

Accelerating the Transformation of Indoor Cellular Connectivity

Oceus' MOCN (Multi-Operator Core Network) Neutral Host Network (NHN) Solution: A Paradigm Shift in In-Building Cellular Connectivity Coverage, Affordability, and Emergency Communications

There is no doubt that the future of cellular traffic relies on improving in-building coverage, yet current indoor connectivity solutions remain a cost-prohibitive nightmare for users and carriers alike.

Without secure and efficient in-building cellular connectivity, it will become nearly impossible for organizations, including government and enterprise, to operate smoothly in the digital age and to be prepared for the smarter, better, and faster wireless connectivity demands of the future.

This need is especially urgent for high stakes military and emergency services and others with critical operational missions demanding reliable, uninterrupted, and highly secure in-building communications systems available around the clock.

An International Association of Fire Chiefs survey currently reports that, when out on emergency calls, nearly all first responders (98.5%) have experienced dead spots in buildings.

With wireless drop and dead zones prevalent in most facilities including large stadiums and entertainment venues, multi-story buildings and hospitals, and K-12 schools, a timely, affordable solution is needed that will amplify signals indoors and close this gaping hole in wireless connectivity.

The Oceus Neutral Host Network Solution is deployable in weeks versus months with other alternatives.

IS THE OCEUS MOCN GATEWAY TODAY'S IN-BUILDING SOLUTION?

Oceus' MOCN Neutral Host Network Solution answers the in-building communication and data challenges of public and private networks to boost signals, reduce interference and latency, and enhance security.

As industry leaders, we understand the unique and demanding communication and data challenges for a broad range of markets including Defense, Commercial, FedCiv, and First Responders in a wide range of austere, sensor-dense, remote, and complex operating environments.

Today, by using a multi-operator neutral host network to cost-effectively deliver strong cell signals to indoor locations of any size, we are able to provide an alternative solution to deliver highly secure, reliable, and cost-effective indoor coverage.

Both advancements in cloud computing and the relatively new availability of CBRS (Citizen Broadband Radio Service), a lightly licensed, carrier neutral shared spectrum band that is available for commercial use at zero cost, have created the ideal band for a flexible and feature-rich neutral host solution.

The Oceus CBRS-based neutral host network is a single shared network and an affordable option for small and medium sized buildings as it doesn't rely on signals from outdoor cell towers or cost-prohibitive DAS systems to extend coverage to subscribers of multiple mobile network operators (MNOs).

MOCN Neutral Host Network Solution

THE BENEFITS OF THE OCEUS MOCN NEUTRAL HOST NETWORK SOLUTION ARE MANY

The Oceus NHN allows multiple MNOs to:

- share a common RAN network infrastructure while maintaining their own individual core
- support voice and data, and all emergency services
- provide encryption from eNodeB (CBRS small cells) to the MNO core
- ensure that all MNO public cellular and private cellular traffic is completely isolated

In addition, the NHN solution is **deployable in weeks** versus months with other alternatives.

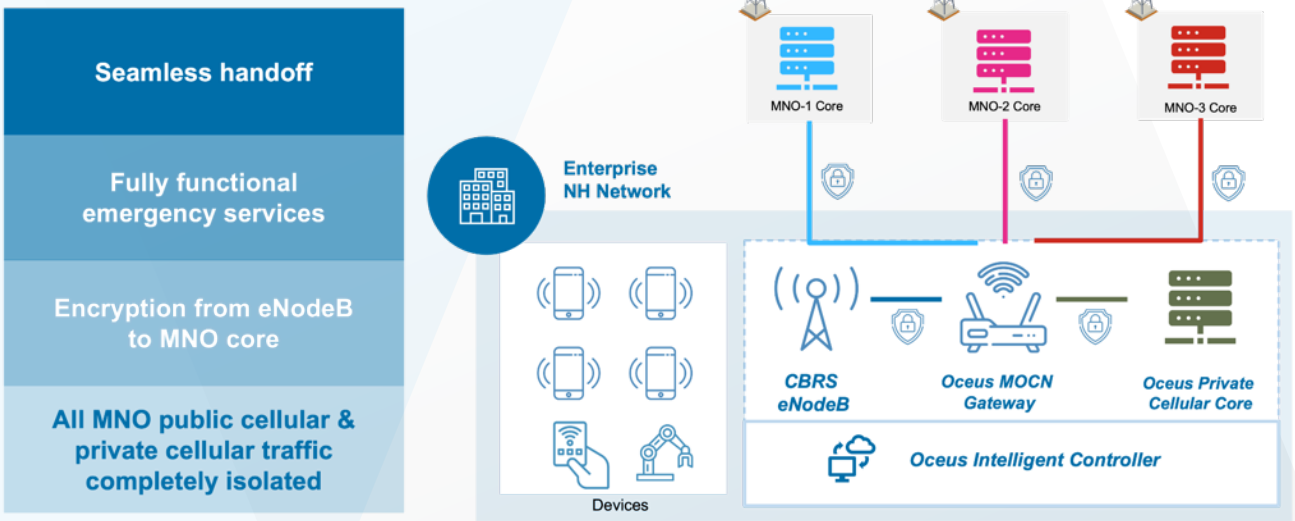
WHICH ORGANIZATIONS WILL BENEFIT THE MOST?

Since the wireless data demands of the 5G era impact nearly every organization, healthcare centers and hospitals, sports and entertainment venues, transportation hubs, military bases, factories, manufacturing plants, office buildings, retail, and emerging enterprises can all benefit from indoor network technologies.

A reliable in-building cellular communications network:

- provides seamless wireless coverage that can power 5G
- can boost carrier coverage
- can be controlled by the hosting enterprise
- can be remotely monitored and managed
- is scalable for future deployment
- can repel outdoor carrier signals

Oceus Solution Proven In the Lab



To learn more about how Oceus' NHN Solution and private 5G network solutions can help MNOs, properties, and other organizations transform to achieve reliable, secure indoor cellular coverage, visit **oceus.io**.

About **Oceus**

Oceus empowers government and commercial enterprise with intelligent private 5G communications for uninterrupted critical operations in challenging environments where deterministic delivery of data in a wireless environment is critical: in-building, campus-wide, and on-the-move.

Oceus delivers advanced wireless network infrastructure with the mobility, security, and performance needed for seamless connectivity. Our edge computing capabilities provide low latency, ultra-high reliability, and enhanced security for wireless IoT devices and applications. The Oceus Intelligent Controller provides software-defined network orchestration using AI/ML to automate the management of 5G enterprise systems and applications for military operations, border security, disaster response, smart cities, logistics, transportation, manufacturing, healthcare, education, utilities, and energy.

Oceus is headquartered in Herndon, VA, with Oceus Technologies, our R&D lab, and our Integration and Operations Center both located in The Colony, TX.