



COERAN

Customer Owned Enterprise Radio Access Network

A Verizon-Nokia program that provides network coverage.



PROGRAM OVERVIEW

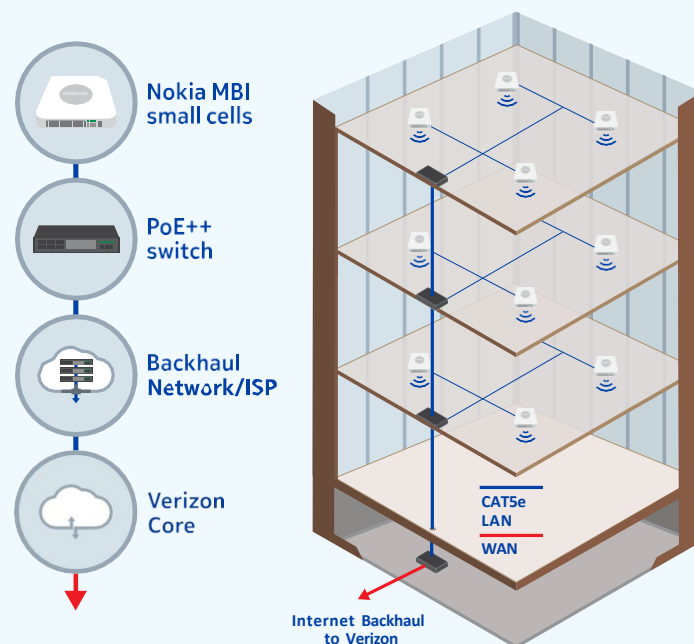
The Nokia Verizon COERAN program is a joint initiative where end users (customers) can purchase a Verizon signal source directly from Verizon's supplier Nokia. Nokia sells the signal source through a Nokia fulfillment partner, AMT. The end user works directly with AMT to procure and obtain ongoing support for the signal source. Below are a few highlights of the program:

- Full turnkey solution from Nokia/AMT
- Nokia works with Verizon to obtain all necessary approvals
- Customers own the signal source (not a lease)
- Customers provide transport (LAN and Internet) to Verizon's network
- All deployments are designed, installed and commissioned by Nokia
- Nokia performs Tier 1 through Tier 3 support and provides daily KPIs

The ability of building owners, enterprises and integrators to own a Verizon signal source creates tremendous flexibility when tackling in-building communication challenges.

ACCESS POINT DEPLOYMENT (Small to Medium)

- Individual deployable solution, one to many (no controller)
- Potential to be daisy chained via Ethernet
- 250 milliwatt RF power, safe to be placed anywhere indoors
- PoE++ powered for easy installation
- High capacity, 400 users per small cell



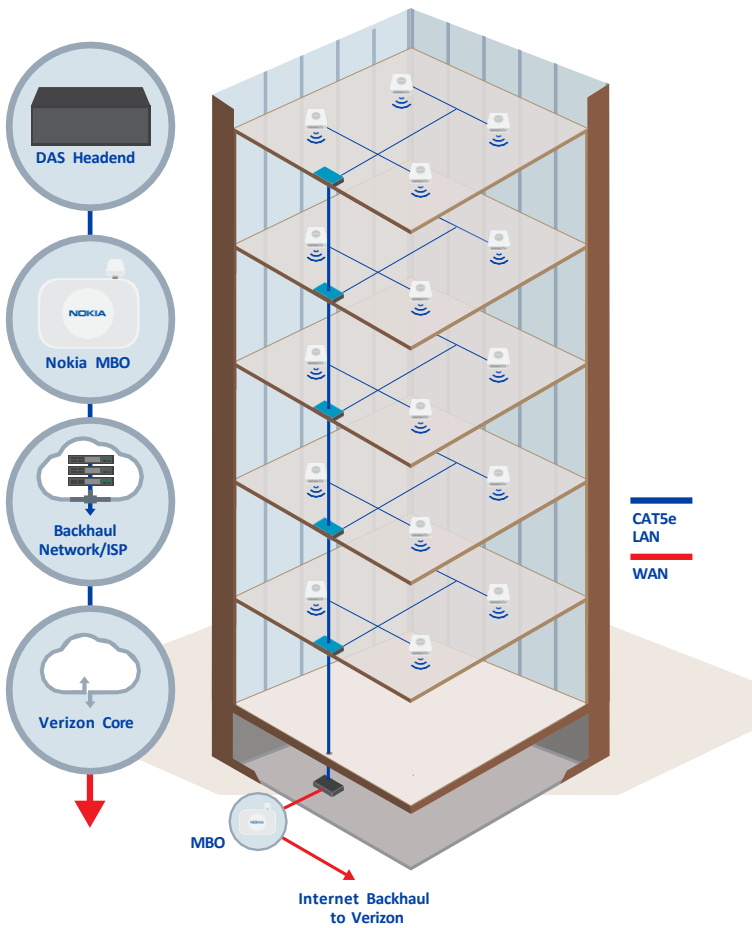
800+ users

Nokia radios can support over 800 simultaneous users.

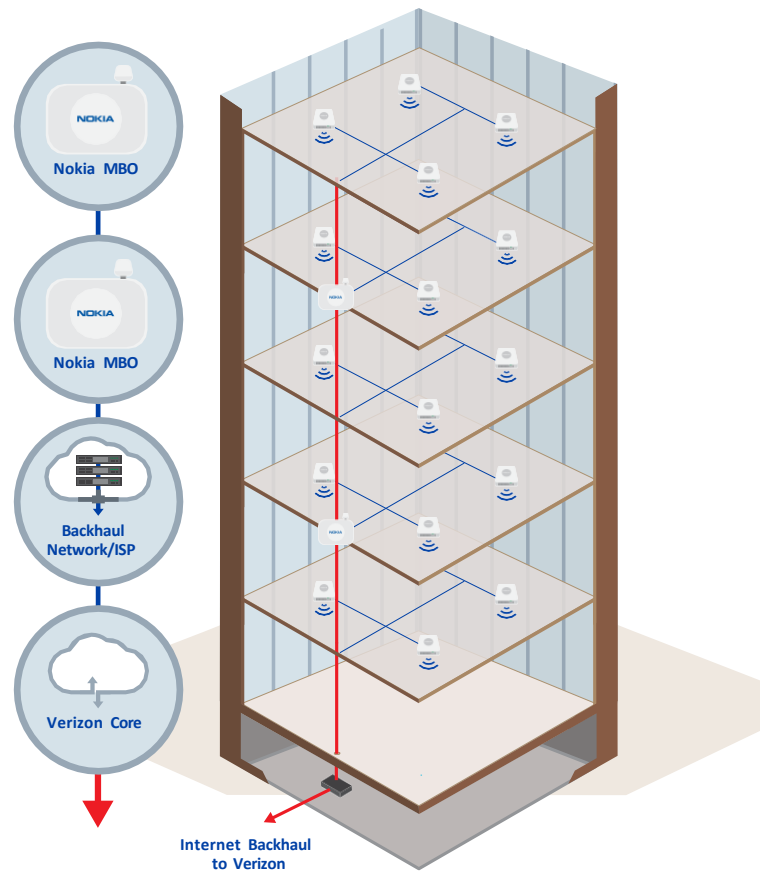
DAS DEPLOYMENT (Medium to Large)

- 5 Watt signal source that can power a passive or active DAS
- Nokia can create the passive DAS or install an active DAS
- Each small cell can support a sector with up to 840 simultaneous users
- Supports PCS and AWS bands

Active DAS



Passive DAS



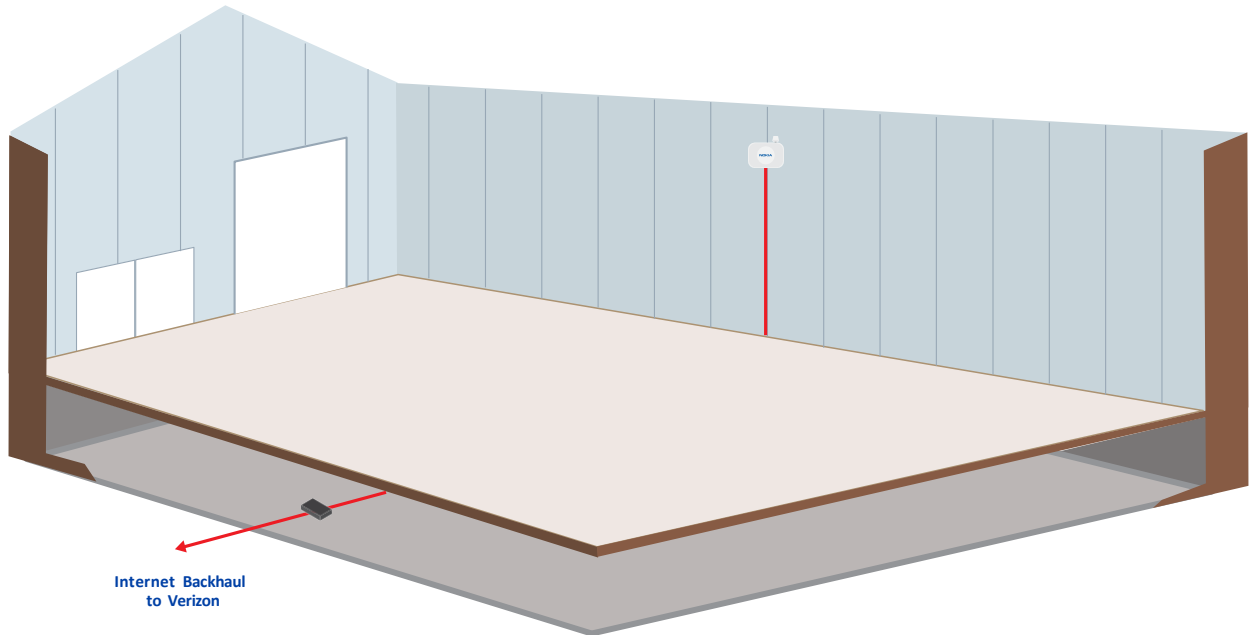
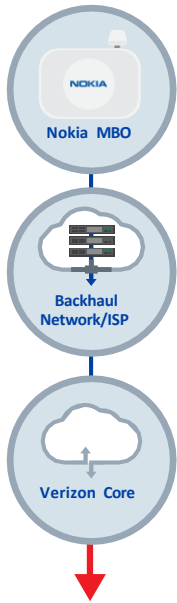
LTE

Nokia small cells support all features of the outdoor LTE network.

WAREHOUSE DEPLOYMENT

(Large Open Area)

- 5 Watt small cell that can be mounted on a high ceiling (indoor)
- Single small cell can cover 100K + SF of open indoor space
- Up to 840 users per small cell deployed



OUTDOOR DEPLOYMENT

(Campus Environment)

- VZ local market outdoor pre-approval required
- Single or multiple small cell deployment
- Attach to an existing tower or building
- Omni or directional antennas
- 840 users per small cell deployed

