

Nokia AirScale Wi-Fi for Governments

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# The Wi-Fi network you need, without heavy IT investments

A secure and reliable Wi-Fi network is an integral part of the smooth running of many organizations. From convention centers, hospitals, shopping malls and universities, to cities, airports, industrial sites and train stations, seamless Wi-Fi connects employees, customers citizens and visitors as they go about their daily life. Wi-Fi is the technology choice, supporting billions of devices and offering reliability, performance, security and low costs.

Getting the right Wi-Fi provision for you is important. As a small city, you may want someone to host it for you, reducing OPEX. As a government you may prefer the benefits an on-site controller brings.

Whatever your requirements, Nokia offers the flexibility you need.

# AirScale Wi-Fi grows with your needs



# The solution is Nokia AirScale Wi-Fi

We offer a complete package from installing Wi-Fi access points through to managing the network. Using the latest technology, Nokia simplifies Wi-Fi for you by taking on the responsibility for running and managing your network to support your business now and in the future. Nokia AirScale Wi-Fi leaves you free to focus on your main priorities without investing time, money and resources into deploying and managing your own Wi-Fi network.

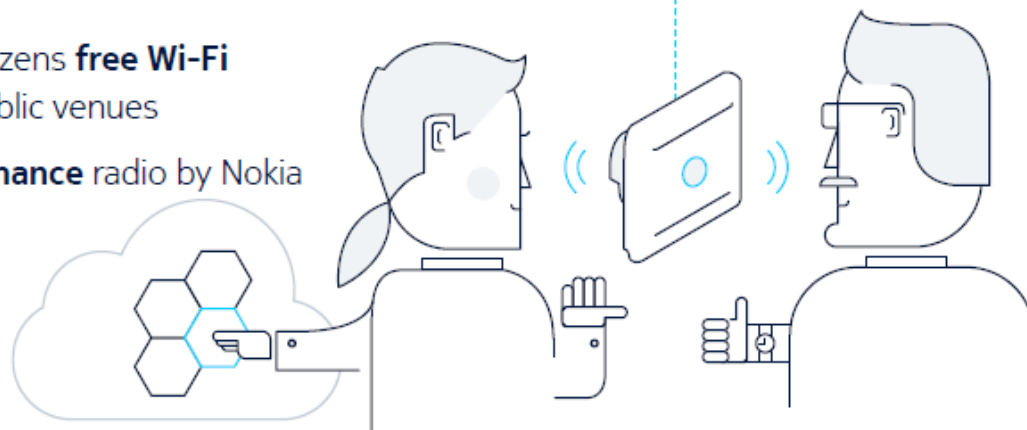
Nokia AirScale Wi-Fi solution consists of AirScale Wi-Fi Access Points and the AirScale Wi-Fi Controller. These can be provided on a hosted, pay-as-you-go basis, matching the needs of the smaller city. Alternatively, larger governments can opt for an on-site controller, allowing easy integration with their existing IT systems.

# Nokia AirScale Wi-Fi for cities



- ◆ Offer your citizens **free Wi-Fi** services in public venues
- ◆ **High-performance** radio by Nokia

- ◆ **Simple** to deploy and operate
- ◆ **Affordable**, optimized and predictable total project cost



Quality Wi-Fi made simple



# Rapid deployment of high performance access points

AirScale Wi-Fi Access Points are available for both indoor and outdoor deployments. They implement the latest generation 802.11ac Wave 2 Wi-Fi standard to bring aging infrastructure up to date and are ready for changing future demands. Authentication technology based on EAP protocol allows a user's device to discover and access the Wi-Fi network with different credentials and online sign-up for ease of use and total security.

For the busiest locations, AirScale Wi-Fi uses automatic channel assignment to ensure traffic loads are balanced across the network and frequency bands to achieve fair use of resources. Fast handover and client mobility support ensure service continuity as users move from one access point to another. All of which adds up to a reliable Wi-Fi service for all users.

All the AirScale Access Points are compact and stylish to complement the professional environment of any organization, both indoors and out. And with plug-and-play capability, they can be deployed quickly and with minimal effort for a rapid roll-out of the network.

# Protecting you and your citizens

Security must be absolute if you're deploying Wi-Fi in public spaces. Nokia AirScale Wi-Fi has advanced capabilities to detect and classify malicious activities, including the mitigation of rogue access points that could damage data security and network performance.

The AirScale Wi-Fi Controller provides secure user authentication for sensitive transactions and critical Internet of Things (IoT) applications, while Internet Protocol Security (IPSec) can be configured on the bearer plane between access points and a security gateway to securely tunnel traffic.



# Wi-Fi matched to the needs of all government bodies

No matter the size of your organization, how extensive your needs, and whatever your communication aims, Nokia AirScale Wi-Fi has the flexibility to support you.





### **High-density venues**

High-density venues include stadiums, event arenas, convention centers, airports, train stations, retail malls and universities. All are locations in which people congregate in large numbers and expect reliable connectivity. Often, the venue will also seek to provide digital services to entertain and engage visitors.

Combining AirScale Wi-Fi with other Nokia solutions creates a complete high-capacity venue network using cost-effective wireless and wireline connectivity. For example, our Multi-access Edge Computing solution supports value-adding applications, such as local delivery of high definition video, augmented reality, contextual advertisements, indoor navigation and video surveillance.

### **Cities and municipalities**

Ubiquitous wireless connectivity underpins the smart city by connecting citizens and visitors, as well as IoT applications to efficiently manage resources and safety.

AirScale Wi-Fi outdoor access points with plug-on or external antennas provide the capacity and coverage needed in open spaces such as city squares, streets and parks. These compact units integrate easily with street furniture such as advertising pillars, bus stops and equipment shelters. In parallel, indoor Wi-Fi access points can be deployed in public buildings.



# Why Nokia for Wi-Fi?

**Performance:** Nokia AirScale Wi-Fi implements state-of-the-art 802.11ac wave 2 (160 MHz) and 4x4 MIMO technology.

**TCO:** Our solution provides low total cost of ownership (TCO), based on disruptive access point pricing, plug-and-play deployment, cloud architecture and the option to deliver as a 24/7 service.

**End-to-end solution:** Nokia AirScale Wi-Fi can be complemented with a feature-rich Wi-Fi gateway (for lawful

interception), Multi-access Edge Computing (MEC), Passive Optical LAN and microwave radio.

**Captive Portal and Analytics:** The cost-effective yet feature-rich Captive Portal solution provides a variety of onboarding options and analytics capabilities and can be easily customized to your needs.

**Wi-Fi, LTE, 5G:** Wi-Fi can be combined with LTE, which quickly evolves to unlicensed bands (such as CBRS and MulteFire).

**Business reliability:** Nokia has the scale and longevity to be your trusted partner with a strong and diversified portfolio of products and the ability to deliver worldwide.

# The total Wi-Fi solution that's ready now

Nokia AirScale Wi-Fi is a high-performance, end-to-end solution that's easy to deploy and run, backed by a world-leading communications solutions vendor. Whether you want an on-site or hosted system, we offer the technology and expertise to deploy and run your Wi-Fi network to the highest quality levels without you needing to make substantial capital investments in servers and other hardware. Nor will you need extensive IT capabilities and resources to look after the network.

With Nokia, Wi-Fi becomes a key part of your success by providing hi-speed wireless connectivity and improved operational efficiency. Not only will you enjoy the high-quality communications technology that our operator customers get but, as Wi-Fi evolves into a new digital communications ecosystem, you can be sure of our long-term support.

## Nokia AirScale Wi-Fi at-a-glance

- No large network infrastructure – Nokia AirScale Wi-Fi is provided as a service.
- Hosted system smaller businesses cuts OPEX to a minimum.
- On-site system for larger governments can match existing IT systems.
- Subscription-based to reduce unnecessary equity tied up in network infrastructure.
- No large investments to update the network when required.
- Minimizes Wi-Fi network deployment time and required IT skills.
- Minimizes total cost of ownership with low-priced Wi-Fi access points.
- Eliminates operational costs to monitor your network 24/7, manage software upgrades and optimize connectivity.
- Simplifies network expansion by adding plug-and-play Wi-Fi access points without degrading live services.
- Reduces your IT requirements to a simple web browser and Internet access to manage your Wi-Fi network from any place at any time.



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Nokia is a global leader in the technologies that connect people and things. Powered by the innovation of Bell Labs and Nokia Technologies, the company is at the forefront of creating and licensing the technologies that are increasingly at the heart of our connected lives.

With state-of-the-art software, hardware and services for any type of network, Nokia is uniquely positioned to help communication service providers, governments, and large enterprises deliver on the promise of 5G, the Cloud and the Internet of Things. <http://nokia.com>

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