



Airspan Private Network Use cases

February 2026

Airspan: Wireless Networks Innovator



Global Deployment | Key Highlights

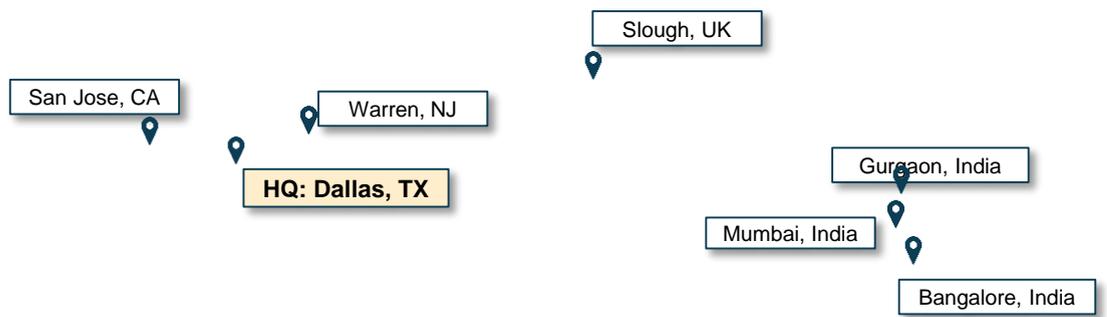
General

Private Company

Backed by Fortress Investment Group

CORNING
Acquisition Corning Wireless

JABIL
Acquisition Jabil Wireless Group



Indoor Solutions
Seamless Connectivity, Anywhere Indoors



Outdoor Solutions
High-Performance, Smart Connectivity

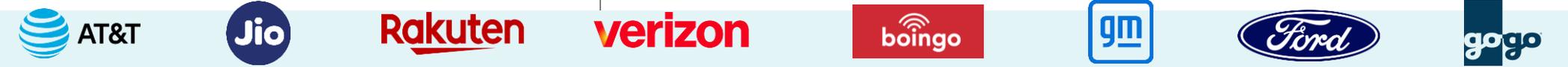


Air-to-Ground & NTN
Innovation Through Programmable ORAN

Total Employee Count: 400

End to End RAN Capability

Global Customers



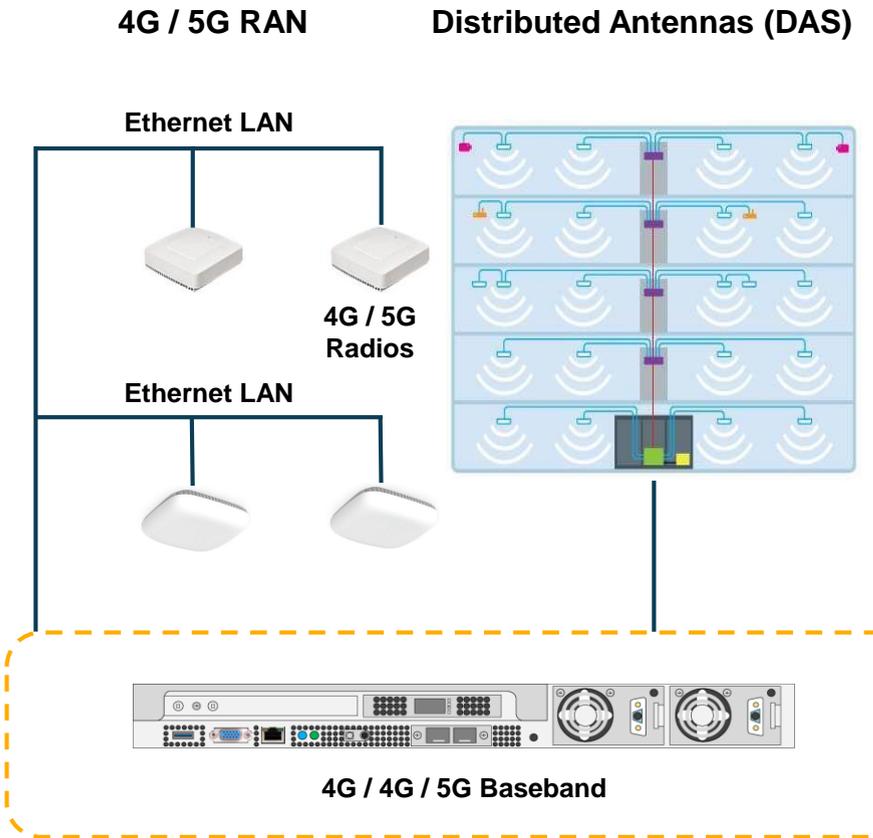
Public Networks

Private Networks

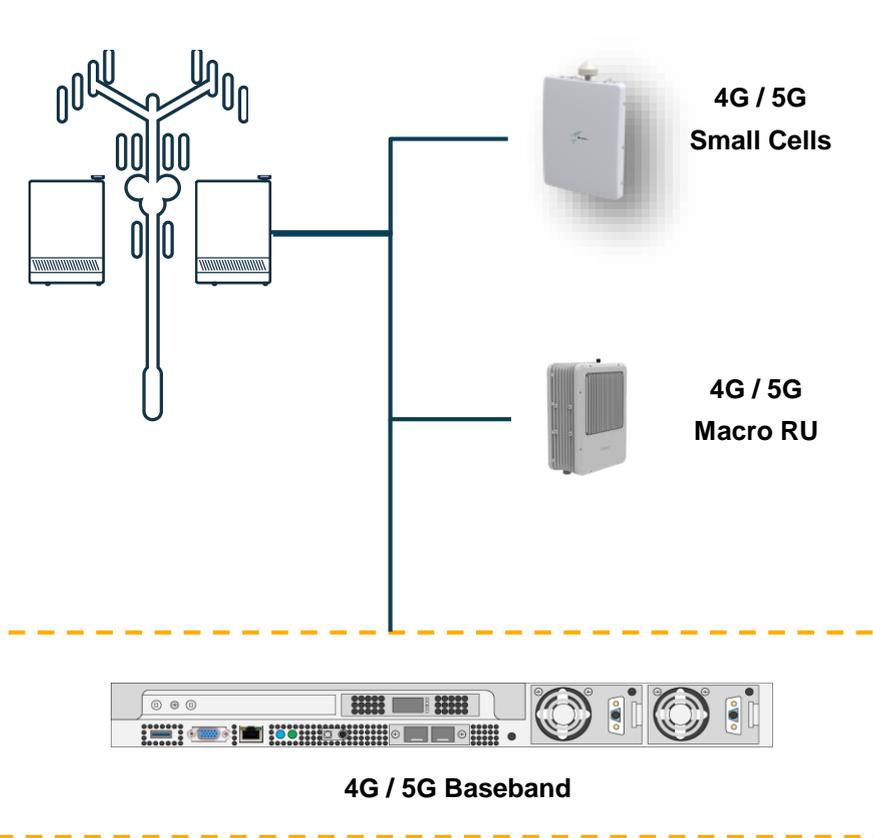
Product Overview



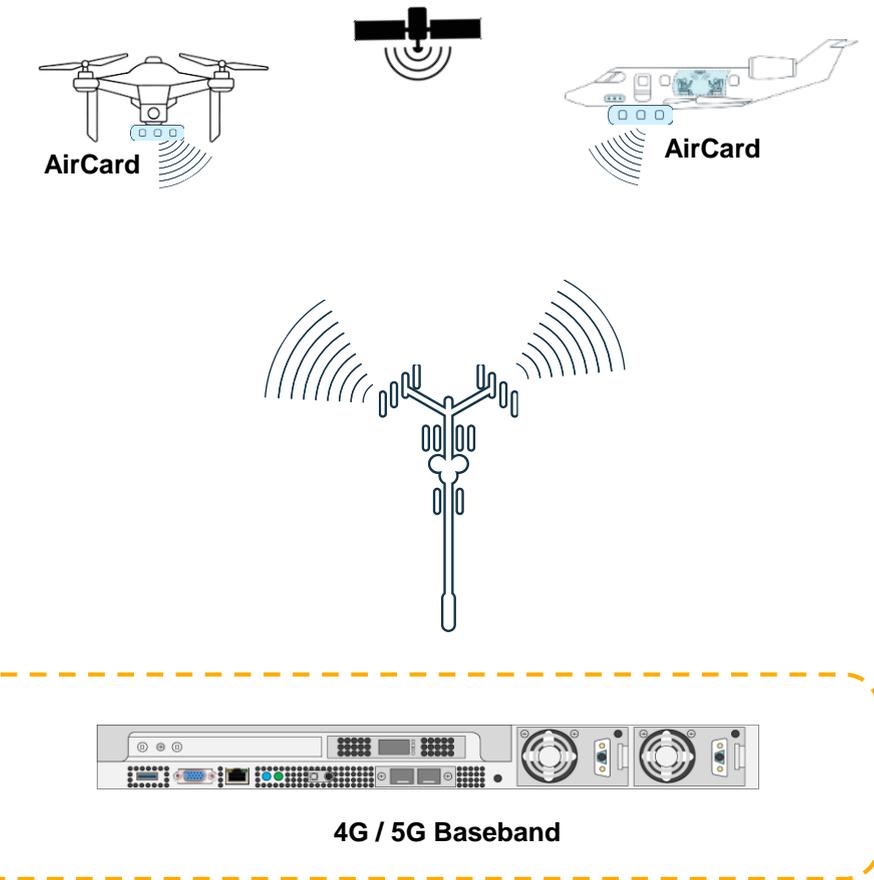
Indoor Wireless Networks



Outdoor Wireless Networks



Air-to-Ground (ATG)



Programmable Open RAN Software Platform

All-In-One e/gNodeB

Available Now



FR1 & FR2 AIO
Outdoor Rated



2026



Next Generation
FR1 AIO

Macro ORAN Solutions



Macro RRUs



Next-Gen Single & Multi
band RRU

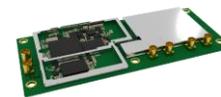


Beamforming RRU
with RF Sensing

Air-To-Ground End-to-End Solution



16TRX Beamforming AAU,
baseband, RAN/OAM Software



Aircraft UE Module
and UE SW Stack



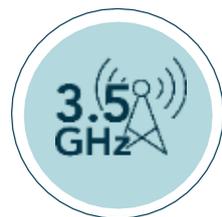
High Altitude Platform
Integrated Sensing
Service, Feeder, Mesh & C2 Links

Airspan Software Solution

Airspan 5G Cutting Edge Strengths

Leading provider of a true End-to-End RAN Solution

Airspan's 5G indoor and outdoor advanced solutions allow customers to quickly monetize their 5G infrastructure



CBRS



mmWAVE



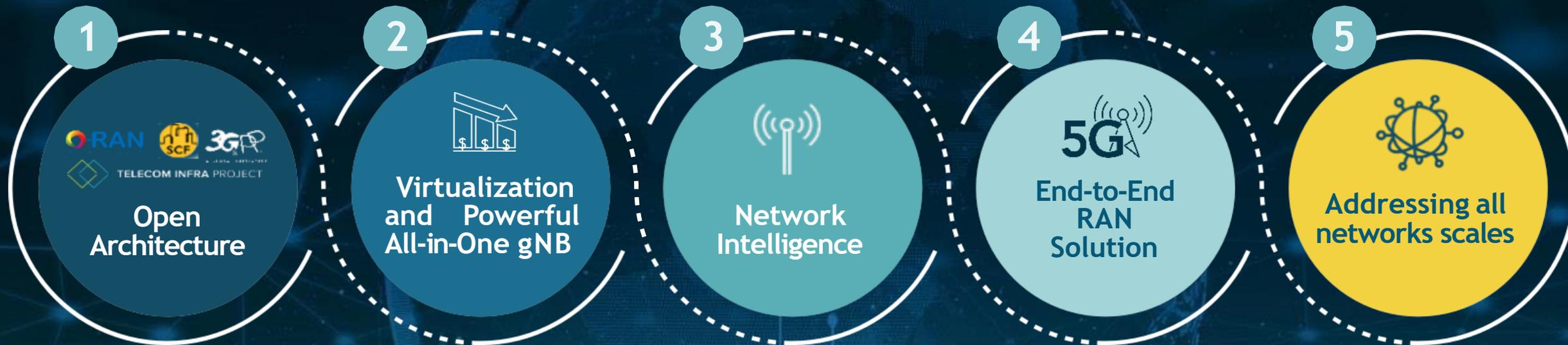
Sub-6 GHz



vRAN



MASSIVE MIMO



Use Cases



ATG Solution

Private Business Aviation. Gogo



Overview

Gogo, a service provider of private business aviation worked with Airspan to upgrade its network to 5G. This is due to rising demand for its 5G service, which delivers internet connections to business aircraft. He said that the network ought to boost Gogo's current in-flight Internet speeds, supported by a 3G network, by 5x to 10x.

Challenges

Gogo's aim to bring 5G to aircraft traveling at over 500 MPH and at elevations up to 35,000 or 40,000 feet, where the challenges in obtaining reliable connections with low latency.

Solutions & Benefits

To meet the requirements, Airspan antennas are installed to support Massive MIMO, a wireless communication technology that uses very large antennas to increase transmission gain and spectral efficiency. Test procedures are discussed below:

- Installation of the first two 5G antennas from Airspan on a tower. Plans call for Gogo to conduct prototype testing of system performance.
- Completion of coast-to-coast flight testing by Gogo of its 5G belly-mounted antennas to validate their performance.
- Interoperability testing using Gogo SIM cards connected to the Gogo 5G core network.

Gogo said it continues to work with Airspan and other technology partners to test and build out its nationwide Air-To-Ground (ATG) network.

[Click here for the link to resource](#)

Airspan 4G and 5G 7.2x Open RAN system

- Airspan Provides the RUs, DUs, CUs and the UE Aircards along with end-to-end management
- Airspan has patented solutions proven to have successfully solved the challenging physics

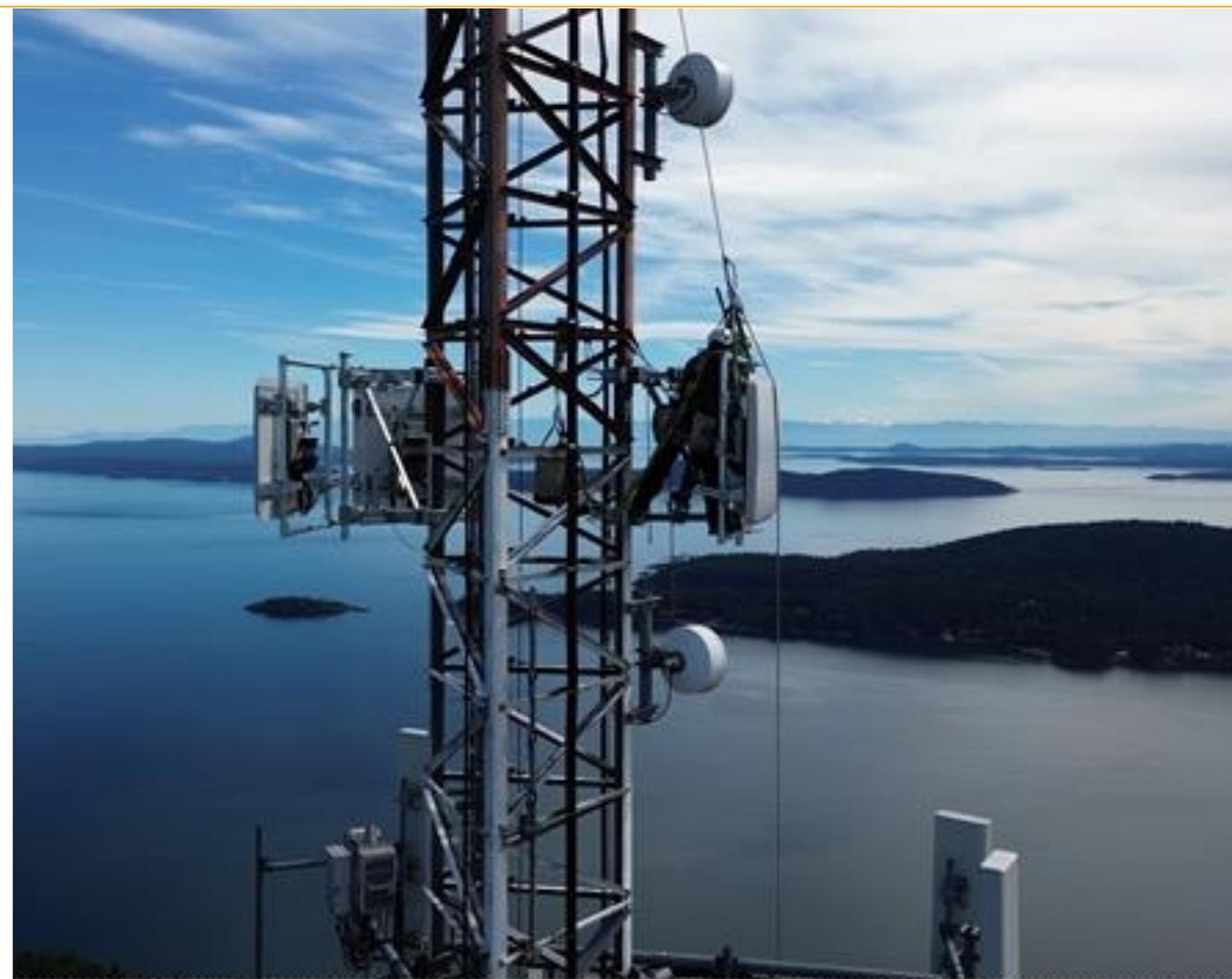
- **Range field tested to very large distance+**

- **UE Speeds field tested to 1000 km/h+**

- **Time & Frequency Varying Unsolicited interference**

- **Throughput field tested to 100 Mbps+ per user**

+ System is Tested at 400 Km Distance for Air to Ground and same can be replicated for high Speed train





5G Connectivity to High-Altitude Maritime Surveillance



Airspan Advantage

- 5G Air-to-Ground (ATG) communications system for Space Compass's High-Altitude Platform Station (HAPS), enabling a new generation of Maritime Domain Awareness (MDA) from the stratosphere.
- The project will demonstrate how 5G connectivity from 16–18 km altitude can deliver secure command-and-control and real-time mission data between a HAPS aircraft and ground stations up to 300 km away.
- Using Airspan's 5G In-Motion ATG technology, the system will provide high-speed data rates, wide-area maritime coverage, and continuous 360-degree connectivity through advanced beam-forming and high-gain antenna systems
- This use case is designed to support persistent monitoring of shipping lanes, coastal regions, and remote ocean areas from above the weather and beyond the reach of conventional networks
- The system includes airborne radios and antennas, onboard 5G processing units, and a full ground-based 5G RAN, core network, and management system - all optimized, as an end-to-end solution for the power, weight, and environmental requirements of stratospheric flight



Partners with

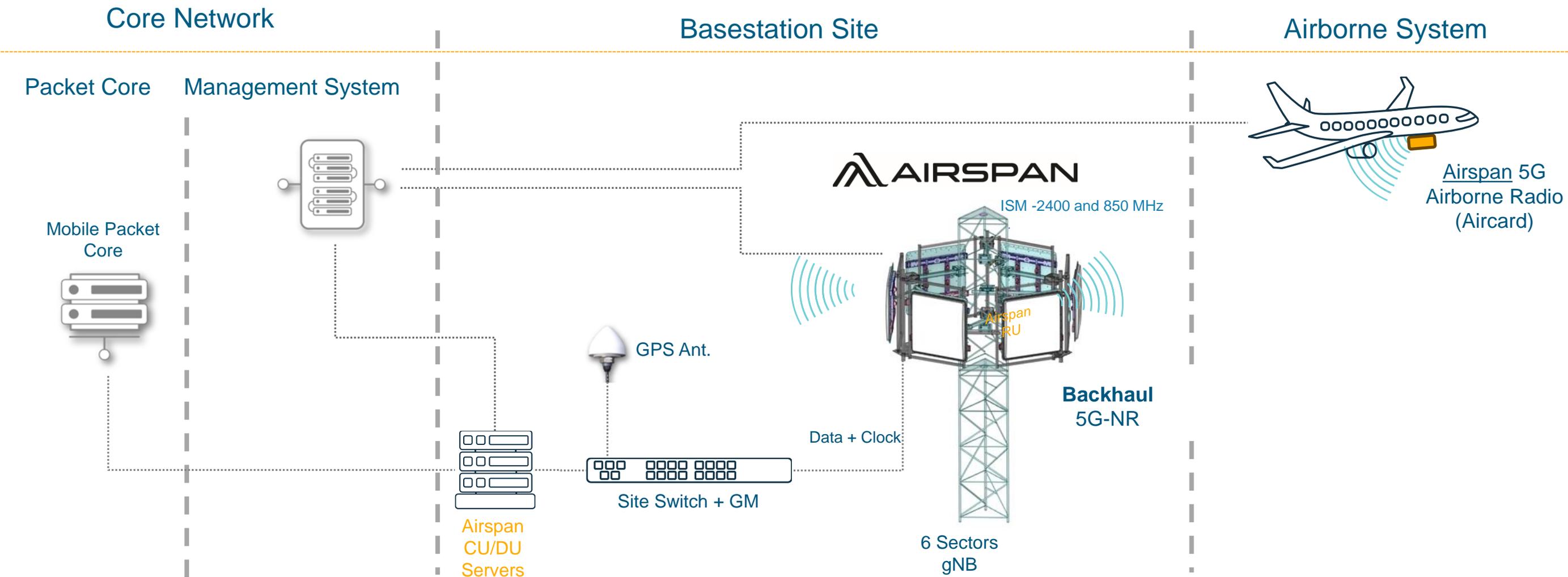


to Bring 5G Connectivity to High-Altitude Maritime Surveillance



Airspan's Deployed 5G ATG Architecture

End-to-End Solution





High Speed Railways

Urban-Sized Private WAN. NextWave/AWTG



Overview

NextWave, a private network service provider partnered with Airspan to leverage their Band 41 (2.5 GHz) spectrum capabilities to provide uniquely wide-area private network coverage in New York’s in-facility 5G coverage and urban 4G+5G transportation channels. NextWave aims to offer seamless high-speed mobile networking for mission-critical services.

Challenges

The required solutions to build a private WAN infrastructure is 5G and a hybrid 4G+5G. The scope of phase-one deployment covers large portions” of Manhattan and surrounding boroughs, including transportation and industrial hubs; the second phase, will cover the entire New York metro area of approximately 15 million people.

Solutions & Benefits

AirHarmony4000 played a prominent role in the success of NextWave’s project. Airspan is one of Airspan’s 4G outdoor products. NextWave deployed 120 AirHarmony4000 enodeB units.

NextWave’s New York Metro service is one of the first private networks to prioritize seamless transitions between in-facility 5G coverage and urban 4G+5G transportation channels. This will allow private network users to maintain high levels of security and performance, even when they leave their facility, with the added value of this spectrum being supported by popular smartphones and other widely available mobile broadband devices. With NextWave’s partnership with Airspan there will be an upcoming plan to bring similar private network operations to San Francisco, Los Angeles, and Philadelphia.

[Click here for the link to resource](#)

Real-Time Drone Detection to Cyber Defense



Airspan and Tiami demonstrated the seamless integration of Tiami Networks' PolyRAN Multifunction Sensor and ISAC capabilities with Airspan Networks' 5G end-to-end solutions, delivering a fully functioning 5G network with built-in ISAC capabilities.

Perimeter and Airspace Monitoring :-

PolyRAN enables continuous monitoring of sensitive areas such as borders, power plants, data centers, defense installations, and national infrastructure. Because it leverages the RAN footprint, coverage stretches far beyond the limits of standalone sensors`

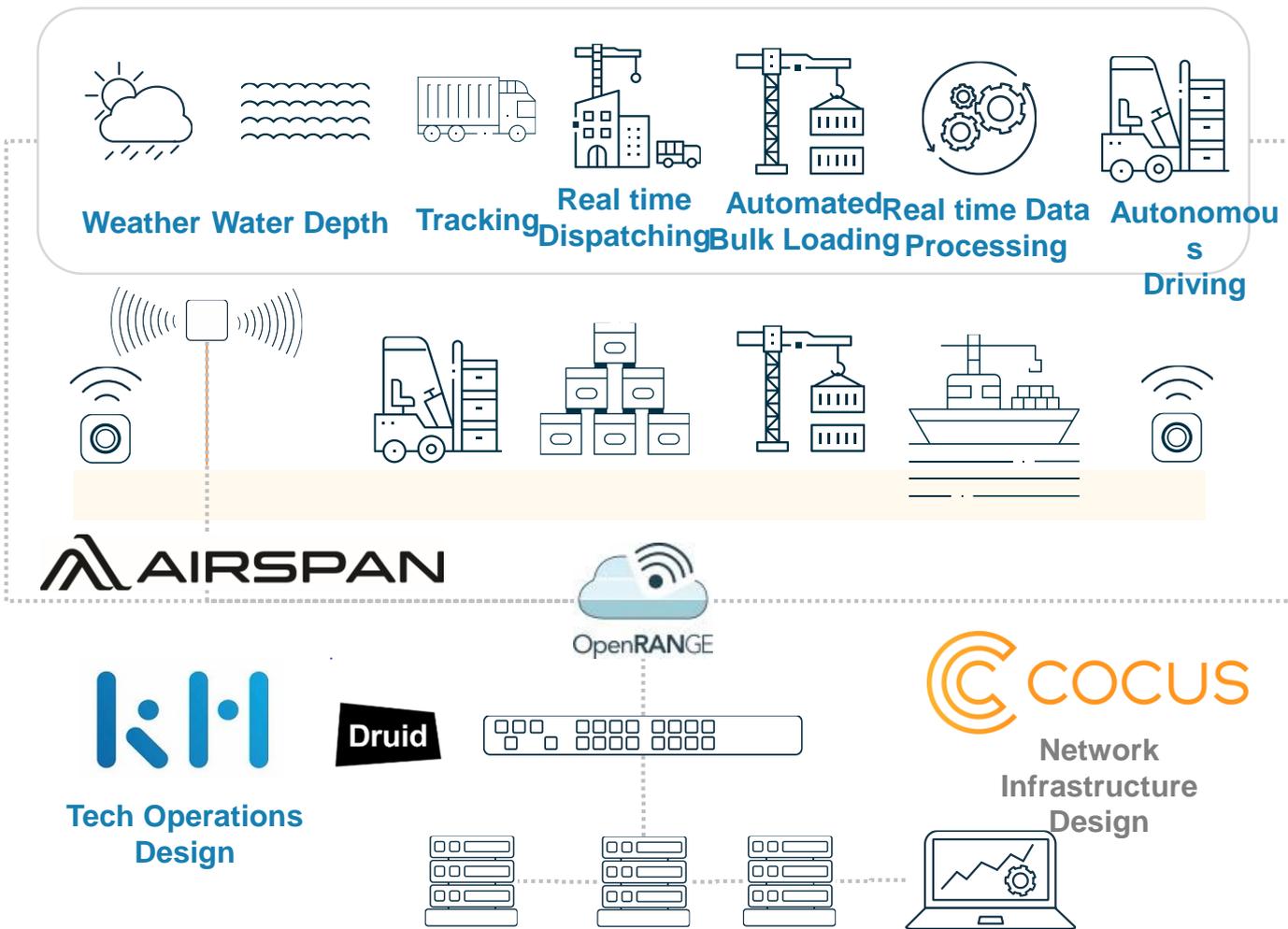
Crowd Density and Urban Monitoring

By analyzing signal disturbances across multiple cells, PolyRAN provides real-time information on crowd flow and density. This supports public safety, event management, city operations, and situational awareness in high-traffic urban spaces

Traffic Flow Analytics:

PolyRAN can measure the movement of vehicles across highways, transit corridors, and critical infrastructure zones. Because it uses existing RAN coverage, it does not require cameras, lidar, or dedicated roadside sensors. This is ideal for smart city deployments and regional traffic intelligence.

Logistics. Port of Rotterdam/Bristol/Wismar



Overview

Koning & Hartman, a Dutch industrial tech provider worked with Druid Software and Airspan to bring automation and intelligence to operations at the Port of Rotterdam Authority. The Port of Rotterdam Authority manages, operates and develops the port and industrial area of Rotterdam and is responsible for maintaining a safe and smooth handling of all shipping.

Challenges

The Port of Rotterdam Authority wants an autonomous ship by 2025-2030. To achieve this, it installed sensors across its 42-kilometre port area to build a digital twin of the site's set-up and operations to mirror, track, and pre-pilot the shipping movements, infrastructure, weather and water depth. It also runs its IoT platform for data processing. The port needs a reliable private network for multiple applications, including private communication, site automation, and IoT connectivity.

Solutions & Benefits

Druid's Private LTE application was integrated with Airspan's Private 4G solutions. Airspan's carrier grade base stations were installed.

The new architecture gave the port easy control and management of the network. The private network also helped the port to achieve greater efficiencies and at the same time deliver a safer working environment for their employees. Embracing this new technology gained them a competitive advantage. It enables real-time data processing and control of unmanned vehicles that require dedicated data and very low latency.

[Click here for the link to resource](#)



Airport. DFW/ Cologne/Bonn Airport



DFW



Köln Bonn Airport

AIRSPAN

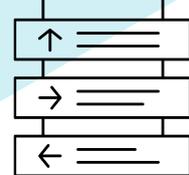
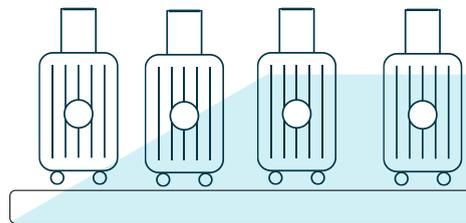


CBRS



Cloud-based Apps

Gate 9
Baggage Sorting



Border Control

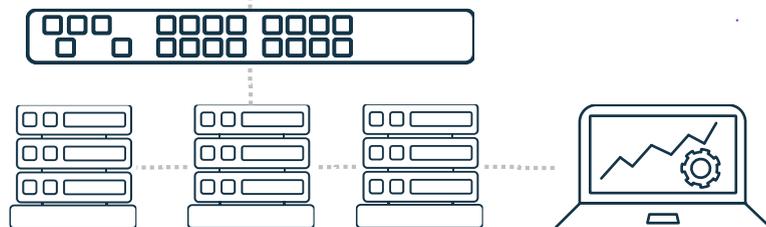


OpenRANGE

AIRSPAN

Betacom

Network
Infrastructure
Design



Overview

Dallas Fort Worth International Airport (DFW) worked with Betacom on a trial to build a Private Network. With extremely large operations, wifi service is insufficient to provide a full mobile coverage to employees, sensor machines and passengers. DFW airport covers 26.9 miles with five terminals, seven runways and 168 gates. It has its own data centers, police force and fire department. It employs more than 30,000 workers.

Challenges

DFW uses sensor technologies to monitor the operations. They installed sensors on escalators, parking lot, restrooms and concession areas. Imaging technologies like cameras and CCTVs are widely used to ensure security in the airport. With all the security devices in place, some of the sensors loses of connection due to the high volume of network traffic. The management also lacks the visibility to these data traffic that may enhance their business intelligence. Some areas in the airport doesn't have any internet connection at all.

Solutions & Benefits

The recommended infrastructure design is a Private Network using CBRS spectrum under General Authorized Access. With Betacom's partnership with Airspan, its CBRS and Open RAN solutions were used. The test was conducted at American Airlines gate 9 to support their baggage sorting. The test was successful. Low latency and high bandwidth performance were achieved.

The airport management looks forward to extend this network architecture as a potential business that they can offer to airlines and concessionaires. This will also help them to improve their autonomous vehicles and robotics which are existing at their warehouse operations. Facial recognition of people coming inside and out of the airport can also be made possible.

[Click here for the link to resource](#)

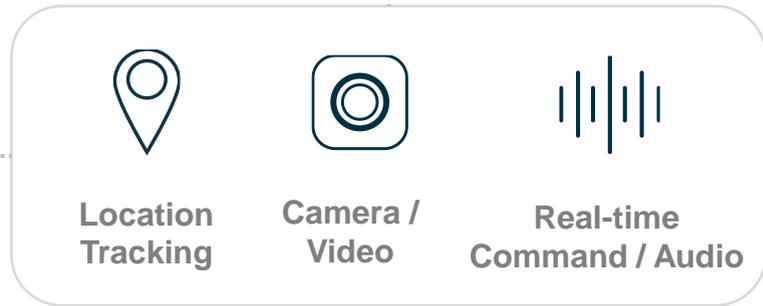


5G Campus

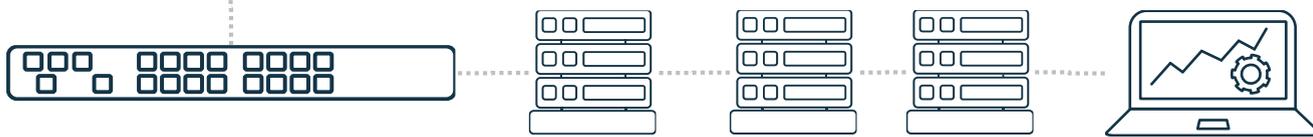
Control Unit



Monitoring System



OpenRANGE



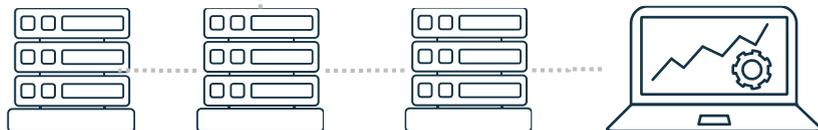
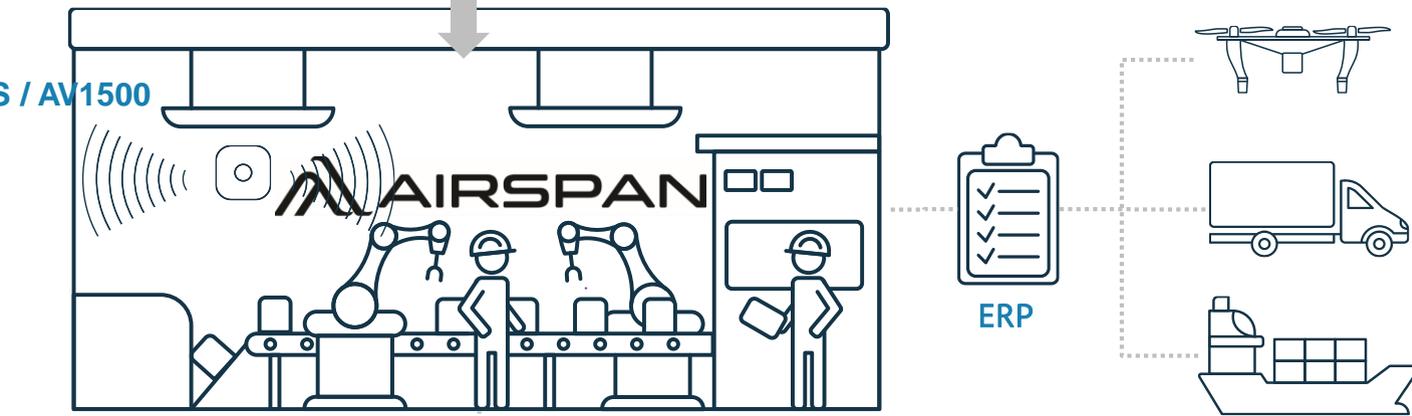
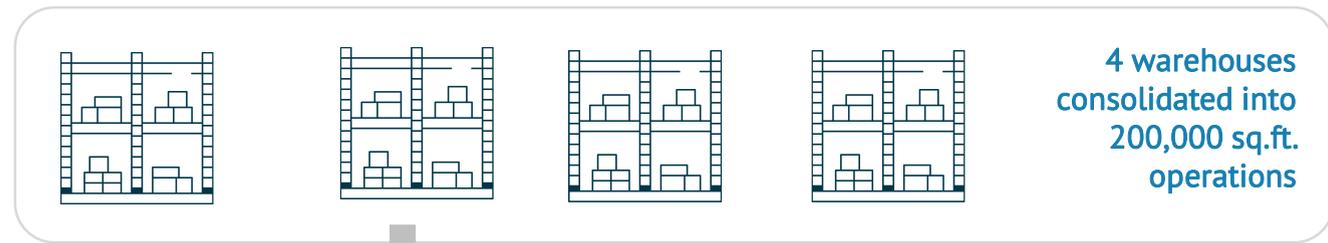
Overview

ZF is a global technology company that provides systems for passenger cars, commercial vehicles and industrial technology including AI that allows the vehicles to operate autonomously. ZF owns a 5G Campus Network, a base station that serves as a test facility that controls the vehicle and the infrastructure that runs their systems.

Challenges

ZF's campus requires a stable and high capacity network to operate their vehicles. This includes location tracking, realtime command given to the vehicle, high quality audio and video transmitted by the vehicle to the monitoring system. Another requirement is an Open RAN technology that





Network Infrastructure Design

Overview

Betacom, a network design firm worked with Airspan to redesign Teltech's new warehouse network architecture. Teltech is a Texas-based company that offers third party logistics, warehousing, solar power system development, talent resourcing and tethered drones. It has consolidated its 4 separate warehouses into a one large operations thus a new robust private network was required to support their services.

Challenges

The capabilities of wifi solution is insufficient for 200,000 square foot operations and Teltech's grand ambition to showcase warehouse automation inline with Industry 4.0 standards. Teltech runs various systems and its core application Netsuite enterprise resource planning to enhance scanning capabilities, material receiving, order fulfillment and shipping. Teltech also needs a highly secure and reliable environment to run their automated inventory cycle thus cutting the manual labor and human error of doing the warehouse inventory. Data are coming back and forth thus a robust network is required to run real-time transactions.

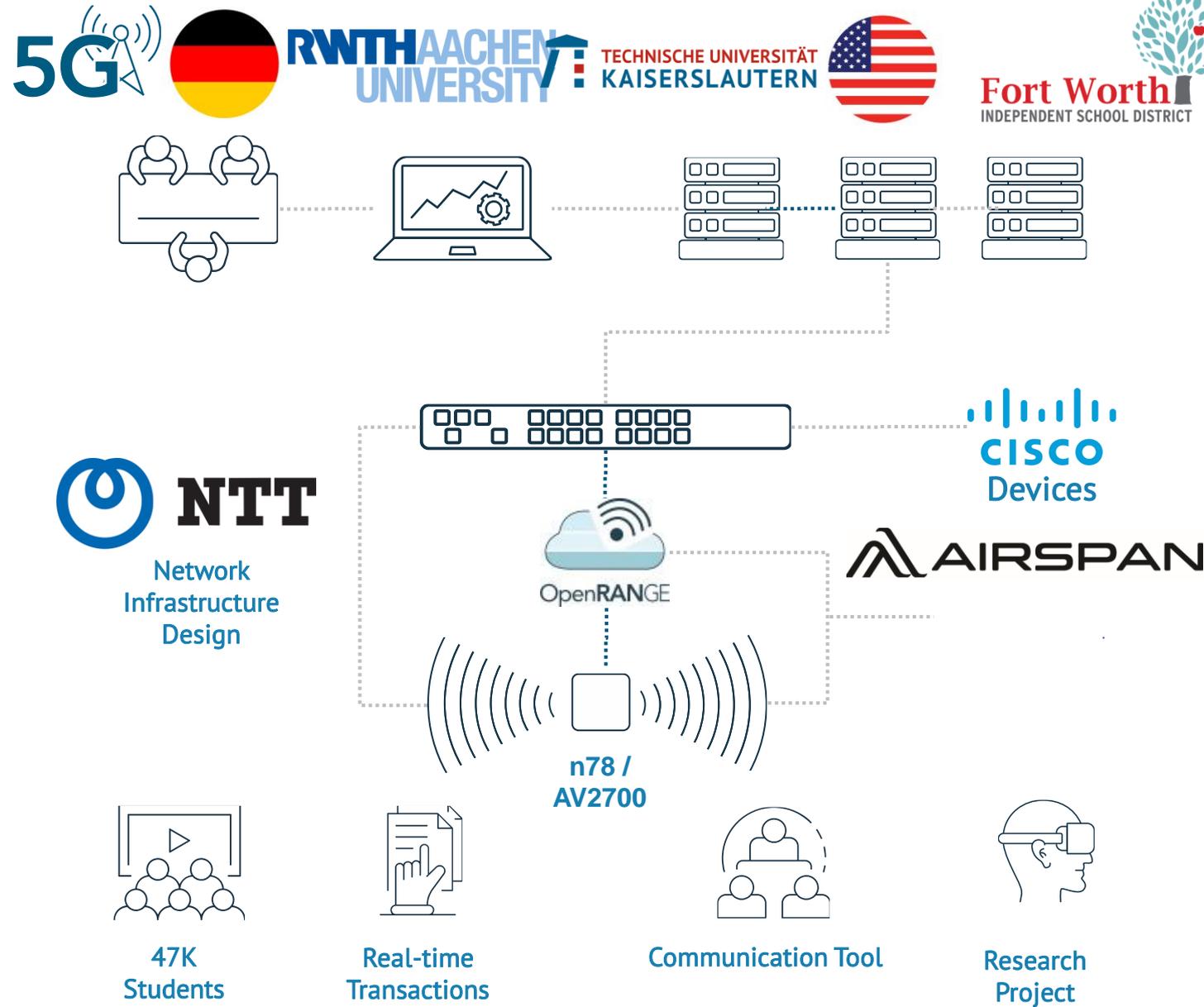
Solutions & Benefits

Airspan's CBRS was selected as the solution for its private network. Airspan's CBRS is an LTE technology that optimizes spectral efficiency. With its new warehouse and private network infrastructure, Teltech is looking forward to a more automated operations, faster delivery of supplies to customers, improved services and new business opportunities. Other than the usage of its private network to its warehouse operations, it will also be used to help regional tribal nations bridge the digital divide. With Betacom's solid network design and Airspan CBRS, Teltech has achieved its goal to become a "smart warehouse".

[Click here for the link to resource](#)



Education. RWTH Aachen University/Four Worth/Kaiserslautern



Overview

NTT, a leading IT infrastructure service company has partnered with Airspan and Cisco to upgrade RWTH Aachen University network infrastructure. RWTH is in need of a robust network services for real-time data processing, voice communication, video conferences and research projects.

Challenges

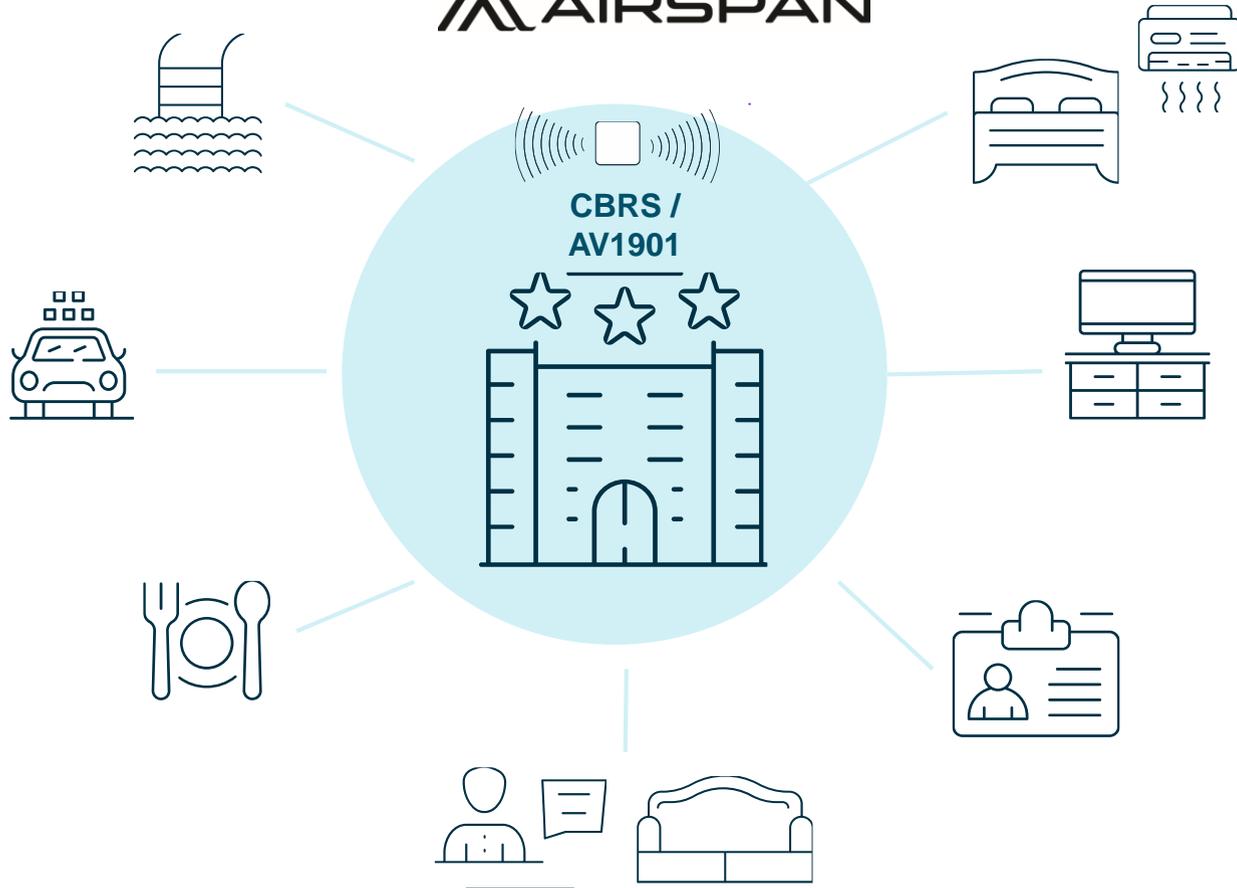
RWTH has a population of 47,000 students. Its current network capacity is deemed to be insufficient to sustain the students' growing need for a reliable internet connection. RWTH has also an internal communication channels of faculty members where they share ideas, topics and future plans. RWTH aims to gain visibility and control with all these data and voice communication which can be made possible by leveraging into Private 5G Network or P5G.

Solutions & Benefits

NTT 's solution is to implement P5G using Airspan's ORAN technology and upgrade its network infrastructure to Cisco appliances.

With P5G, the university's internet connectivity was optimized due to its high bandwidth capacity and low latency. RWTH research initiatives benefits from P5G for their EU-funded projects such as robotics, location-based emergency route planning, and real-time data transmission in hospital operating rooms. The overall network performance was enhanced because P5G enables an improved IT security and modern hybrid network since Airpan's ORAN was designed to be compatible with various vendor devices.

[Click here for the link to resource](#)



Overview

GFO Investments partnered with Airspan to upgrade Gale South Beach Hotel in Miami. GFO Investments is a private wealth management advisory firm focused on real estate development and ventures such as hospitality operations, private financing, and capital market securities.

Challenges

GFO aims to provide convenience to the hotel's guests and members. The project is expected to deliver an improved internet connection for high-speed voice and data coverage and hotspot capabilities. The hotel also invested on advanced systems that enables contactless guest interactions and touchless room controls that requires a reliable network to run these applications.

Solutions & Benefits

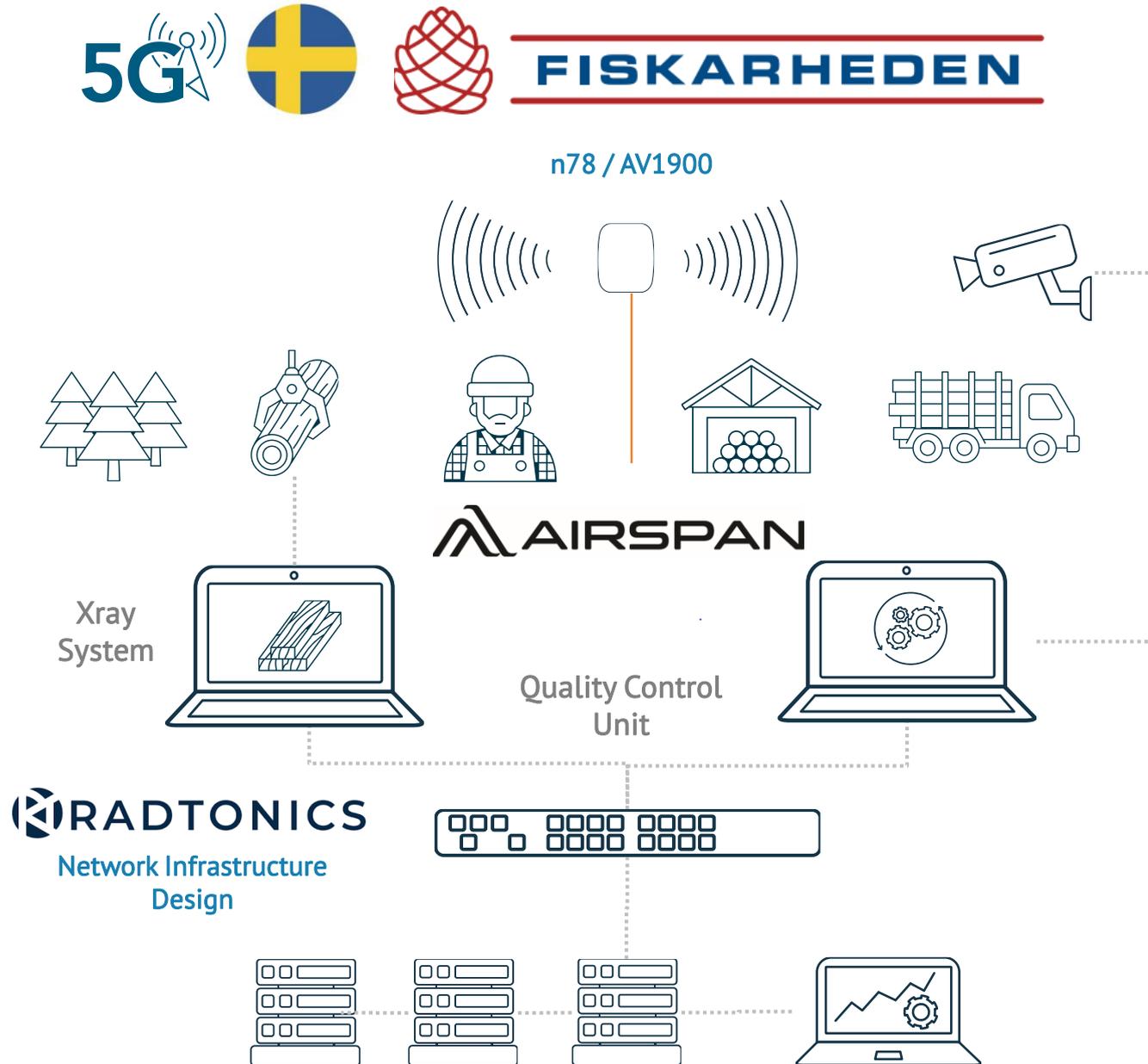
Airspan's implementation of CBRS network was successful. Dozen of radios were strategically placed throughout the hotel for optimal coverage and performance exclusively for the hotel's clientele and staff.

The hotel's guest can enjoy the 5G coverage whether they are in the hotel's dining outlets, rooftop pool, public spaces and guest rooms. They can utilize the hotel's internet for their streaming activities.

It also improved the day-day hotel operations. Running the automated check-in and check-out procedures for Hilton Honors loyalty members are faster, which cuts labor costs and eliminates lines that are irritating for guests. With 5G, all systems are interconnected and communicate seamlessly in real-time.

[Click here for the link to resource](#)

Digitalized Sawmill. Fiskarheden



Overview

Radtonics, a private network provider partnered with Airspan to build Fiskarheden's Private 5G network or P5G. Fiskarheden is one of Sweden's largest and privately owned sawmill. Upgrading its network to P5G will enable Fiskarheden to become one of Europe's digitalized sawmills.

Challenges

Fiskarheden uses a state-of-the-art CT, an X-ray technology that scans the quality of each log. Real-time imaging are being transmitted to their quality control unit thus a high-capacity bandwidth was required. The safety of their workers are also well-monitored due to the high-risked nature of their operations.

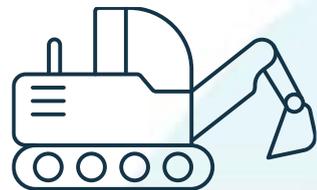
Solutions & Benefits

To improve Fiskarheden oversight of its operations, Radtonics designed its network using Airspan NPN/Private Network Solutions. It is secure, robust and can be installed outdoors making it an ideal solution for a Fiskarheden sawmill and forestry businesses.

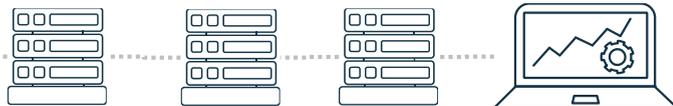
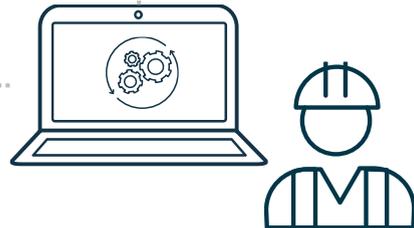
Its network infrastructure is now capable of delivering an end-to-end solution to automate its production and ensure the safety of its workers. With Fiskarheden modernized network infrastructure, it has become one of the first company in Sweden to adapt Private 5G Network. The collaboration of Radtonics and Airspan has proven to deliver a unique solution for an easy, automated and affordable industrial network.

[Click here for the link to resource](#)

Remote Operation Heavy Equipment. Telus & Finning



CAT Command Station



Overview

TELUS Business partnered with Finning to demonstrate how a private wireless network can optimize operations, boost productivity, and enhance worker safety. This project aims to build an industrial-grade private wireless network on-site at Finning headquarters to showcase the remote operation of a Cat® excavator.

Challenges

To operate the excavator requires large bandwidth, low latency, reliable connectivity, control and enhanced security that traditional networks can't provide.

Solutions & Benefits

TELUS Business partnered with Airspan to upgrade its private wireless network. The excavator was controlled from inside Cat Command station to show the real-time communications of heavy machinery. In scenarios where the site conditions are hazardous, the ability to remotely operate equipment can help boost productivity while prioritizing employee safety.

With Airspan's solutions, TELUS Business was able to tailor its private wireless network services for mining, energy, and logistics & transportation businesses. Among the benefits from the new network architecture are enhanced coverage, network scalability, ultra-reliable connectivity and strong data security which TELUS can offer to their clients. This is another proof that Airspan is a business enabler that helps its partners reach their strategic goals.

[Click here for full article](#)





Thank You