

# Indoor Connectivity

Improving coverage,  
enhancing experiences

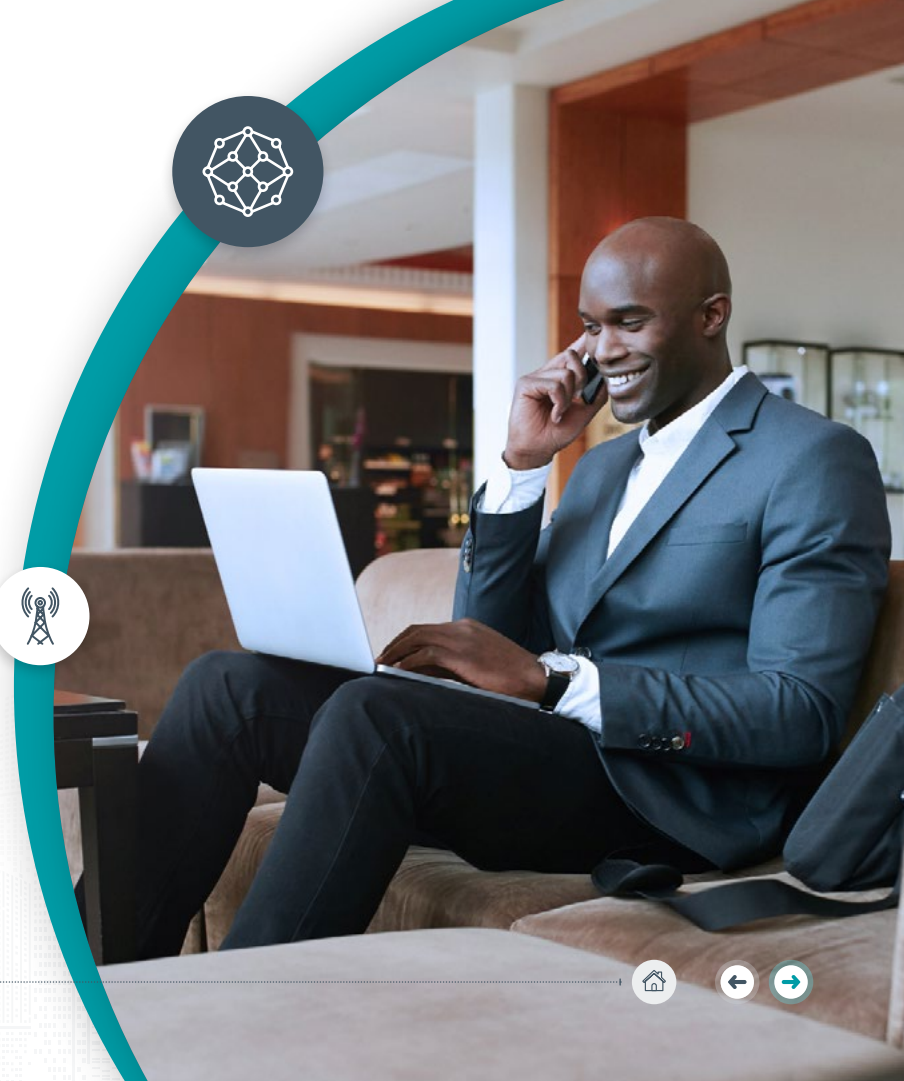


# Closing the indoor coverage and connectivity gap

In today's connected world there's an expectation that mobile coverage will simply be there. When it's not, it can be a frustrating, productivity-impacting issue for building users – one that damages the reputations of owners.

Thick-walls, steel structures and the use of metallised-glass in building design can have a major impact on mobile signals – reducing their strength or blocking them completely. And if the physical building is impeding 4G signals, this will only get worse in a 5G world.

5G connectivity operates at a higher frequency – making signals more sensitive to disruption by physical infrastructure. With the ability to offer ultra-fast 5G in your building a key point of difference for commercial and residential tenants, Cellnex in-building solutions provide a cost-effective option.



# Indoor connectivity in the real world



Cellnex is one of Europe's leading providers of indoor connectivity solutions, meeting the specific requirements of building owners and managers across a wide range of sectors, including:

## Commercial real estate

Seamless connectivity for users, the quality of indoor connectivity makes a cost reducing, competitive difference:

- **Staying competitive** – attracting and retaining high value commercial and residential tenants
- **Staying connected** – staff and visitors can call, email and browse the web everywhere, including basements

## Retail and leisure

Shopping centres and retail environments rely on mobile communications to encourage footfall and make the shopping experience more convenient and enjoyable. But it's the instore experience where reliable coverage really counts:

- **Multichannel retail** – giving customers access to retail apps to browse and buy online if stock is unavailable instore
- **Customer connections** – keeping customers up-to-date and delivering unique experiences through state-of-the-art features
- **Boosting convenience** – with contactless payment, mobile devices that allow staff to interact with shoppers and the right coverage to keep customers connected to friends and family
- **Competitive differentiation** – exceeding the expectations of retail tenants and visitors

## Healthcare

Connectivity is the cornerstone of the digital hospitals of the future. Ensuring optimal staff, patient and visitor experiences means extending mobile coverage to all areas including offices, wards, waiting rooms and more.

- **Patient experiences** – enabling patients to access entertainment services and stay in touch
- **Staff communication** – connecting clinicians and administrators to colleagues across the campus
- **Emergency communications** – ensuring first-responders can communicate effectively at all times

## Live sports and events

Connectivity is an increasingly important part of enhancing the live sport and entertainment experience as fans check-in online, upload pictures and live stream the action. But the benefits of great mobile coverage go beyond this:

- **Experience goes viral** – fans will enjoy the atmosphere (and your brand!) across thousands of social media accounts
- **Drive app-based revenue streams** – promote venue services and special offers to audiences
- **Enhance health and safety** – connect stewards and mobile safety and security teams

# The in-building competitive advantage

A Cellnex 4G/5G indoor multi-operator solution answers the connectivity challenges of today and tomorrow.

Addressing your requirements and the specific challenges of your location – and leveraging the latest Distributed Antenna Systems (DAS) – we will create a built-for-purpose in-building solution that delivers the coverage and capacity your users need and expect.



## Features

- Purpose-built 4G/5G solution
- Tailored to meet your specific needs
- Coverage from all UK Mobile Network Operators
- Fully scalable solution to support changing needs
- Future-proofed for 5G connectivity
- Full network control and management
- Flexible commercial models to suit your business



## Benefits

- Eliminates dropped calls and slow mobile internet
- Ensures seamless voice and data communications
- Enables the delivery of new revenue-generating services
- Enhances brand and encourages customer loyalty
- Tackles the operational and user access issues of WiFi
- Builds the connectivity foundations of a truly smart building

## Evolution of Indoor Connectivity

Cellnex is continually innovating our indoor solutions as technologies evolve. The latest architecture promises to further reduce the costs of delivering indoor connectivity. This approach removes large base stations and telecommunications equipment from dedicated communication rooms – so there's no need to give up valuable space. Power consumption is also reduced, on-site installation is straightforward and ongoing access requirements are minimised.



# A fully managed service from Cellnex

**From design and planning to deployment, and operation support, we are with you all the way.**

**We tailor your indoor connectivity solution to meet your specific business requirements, using our in-house experts, award-winning services and fully accredited, tried-and-tested processes.**

We begin by understanding your needs, conduct detailed site surveys then deliver back a blueprint tailored to your specific building requirements. Our engineering teams will then deploy and commission the indoor solution.

On completion, your network will be fully managed and monitored 24x7x365 to ensure optimal performance.

With expertise in providing flexible commercial models for site and building owners – some requiring no capital investment – we will create a package that is absolutely right for you and your users.

**To discuss your requirements, contact the team [here](#)**



**End-to-end**  
Survey, design and engineering



Deployment and commissioning



Management of mobile operator connections



Operational monitoring and maintenance



Upgrades and extensions

## **Making it easy with a single partner**

As a neutral host – an independent provider delivering connectivity from all mobile operators – Cellnex UK removes the complexities of dealing with multiple stakeholders. We'll engage with the mobile operators and third-party suppliers on your behalf.

Our solutions are built to established industry specifications, including the new Joint Operator Technical Specifications (JOTS) for Neutral Host In-Building, and can be extended as your business location grows. As your single point of contact, we'll manage the whole process for you.



# It's time to get smart about indoor connectivity

**Distributed Antenna Systems (DAS) technology offers building and venue owners a wealth of exciting opportunities to simplify management, reduce costs, generate new revenue streams and address the sustainability agenda.**

Despite the plethora of communication options in our smart homes, offices and leisure spaces, most of us turn to the mobile to make a call, check email or update our social media status. **In fact, 80 percent of mobile traffic either originates or terminates indoors.**

A Cellnex 4G/5G DAS addresses the indoor user experience, closes any coverage or capacity gaps and provides a powerful foundation for today's smart building apps and services.



# Get in touch

**Cellnex is a UK Critical National Infrastructure Provider and one of Europe's leading telecommunication companies.**

We have extensive experience deploying indoor solutions in sports stadia, transport hubs, commercial real estate, hospitals and more.

Find out more and book a meeting with our Indoor Connectivity experts, get in touch at: [IndoorSolutions@cellnextelecom.co.uk](mailto:IndoorSolutions@cellnextelecom.co.uk)



## Further Reading

See how a Cellnex indoor deployment in Manchester City's Etihad stadium is delivering new match-day experiences.

Visit our **indoor connectivity** pages.

[cellnextelecom.co.uk](http://cellnextelecom.co.uk)

Cellnex plays a key role within the telecoms sector enabling connectivity throughout Europe. In the UK, as the country's leading independent telecoms site partner, Cellnex provides critical national infrastructure & services to telecoms operators, emergency services organisations and many other enterprises.

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