cornerstone

FOR MOBILE NETWORK OPERATORS

Small Cell Coverage Solutions

IN PARTNERSHIP WITH

signify IONX

SMALL CELL COVERAGE SOLUTIONS

For Mobile Network Operators

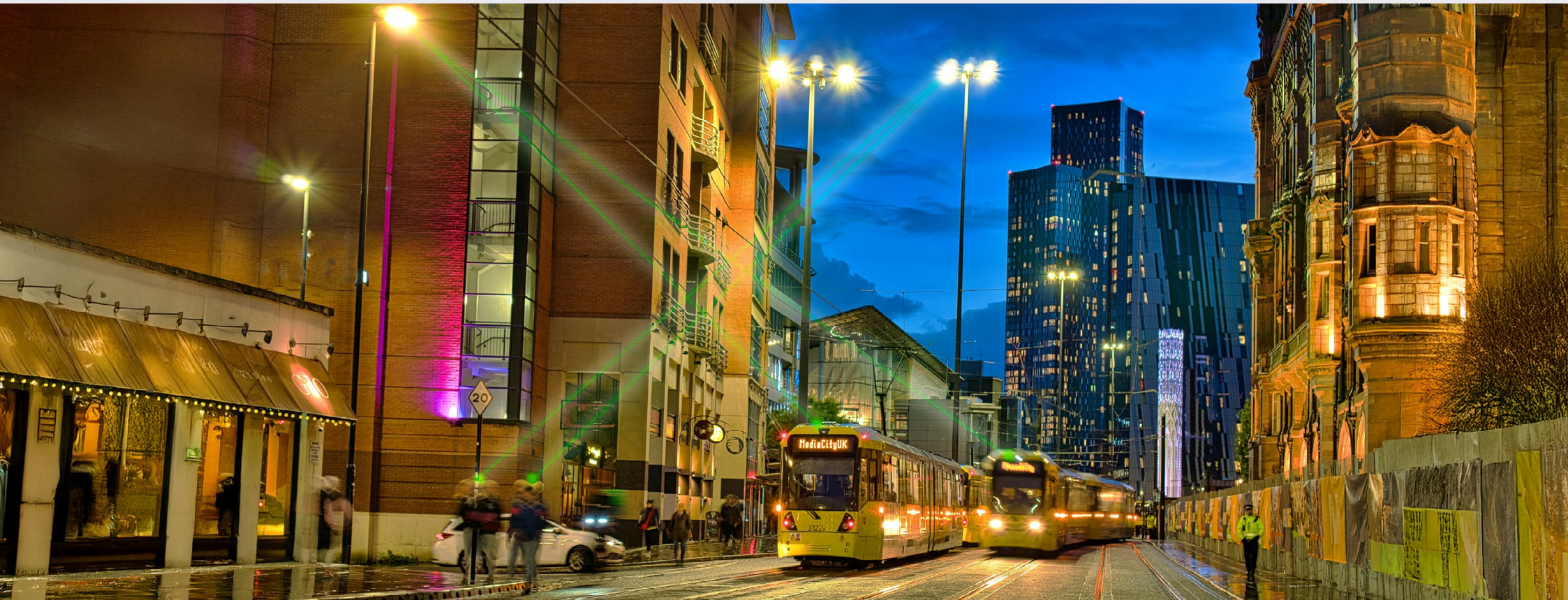
As the UK's largest mobile infrastructure provider, we are introducing Small Cell Coverage Solutions to meet the growing demand for mobile connectivity in urban centres, high-traffic locations, and underserved areas.

Andy Train
Chief Network Officer, Cornerstone

At Cornerstone, we're proud to support the UK's Mobile Network Operators in delivering the digital capacity needed to keep communities connected and thriving.

Our Small Cell Coverage Solutions adopt a shared infrastructure approach, blending advanced technology with industry expertise. This ensures reliable, scalable, and cost-efficient connectivity tailored specifically to the needs of Mobile Network Operators (MNOs).

This comprehensive capability, combined with our proven track record, makes Cornerstone the trusted partner for MNOs seeking innovative and efficient connectivity solutions.



ADDRESSING CONNECTIVITY CHALLENGES WITH SCALABLE SOLUTIONS

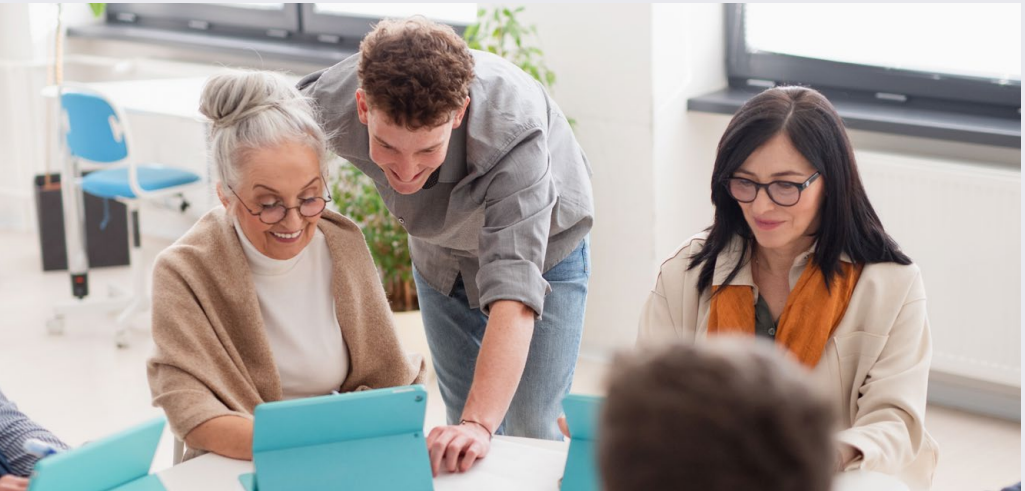
The Challenges of Modern Connectivity

As mobile connectivity becomes an essential part of everyday life, Mobile Network Operators (MNOs) face increasing pressure to meet rising expectations for speed, reliability, and coverage.

The expansion of 4G and 5G networks, combined with the growing demand for data-intensive applications, presents a unique set of challenges. These range from the technical requirements of densified networks to overcoming logistical and financial barriers.

Cornerstone understands the complexities MNOs face and is uniquely positioned to deliver solutions that meet these demands. With a deep understanding of site planning, infrastructure management, and urban environments, we provide scalable small cell solutions that enhance network performance without compromising aesthetics.

By leveraging our expertise and collaborative approach, we enable MNOs to deploy quickly, efficiently, and cost-effectively, ensuring connectivity evolves to meet the needs of businesses, communities, and individuals.



The rapid growth of urban areas, increasing demand for mobile services, and the rollout of advanced 4G and 5G networks present significant challenges for capacity and connectivity.

While traditional network infrastructure has been foundational, these developments require innovative solutions to meet evolving needs.

The exponential rise in data-heavy applications and the growing reliance on phones for everything, from IoT to M2M connectivity, are placing immense capacity stress on networks.

Prohibitive costs driven by lengthy site acquisition and planning processes.

The need for higher-frequency technologies that require more densely deployed equipment closer to end users.

Difficulties in identifying suitable streetside assets with adequate structural integrity, power, and fibre connectivity.

Increased stakeholder involvement in asset ownership and planning permissions.

A desire from infrastructure owners and councils to minimise visual clutter and reduce streetworks from multiple deployments.

Cornerstone's Small Cell Coverage Solutions tackle these challenges with a flexible, scalable, and capacity-driven approach that enhances the performance of existing networks while preparing for future demand.

ENHANCING CONNECTIVITY FOR MOBILE NETWORK OPERATORS

Our Technical Solution

As demand for faster, more reliable mobile connectivity grows, Mobile Network Operators (MNOs) face increasing pressure to deliver high-performance networks that meet the needs of businesses, communities, and consumers. Cornerstone's shared small cell infrastructure is specifically designed to complement existing macro sites, providing a scalable and future-proof solution to meet these challenges. By addressing both technical and operational requirements, our small cell solutions enable MNOs to expand coverage, increase capacity, and support the seamless roll-out of next-generation technologies.

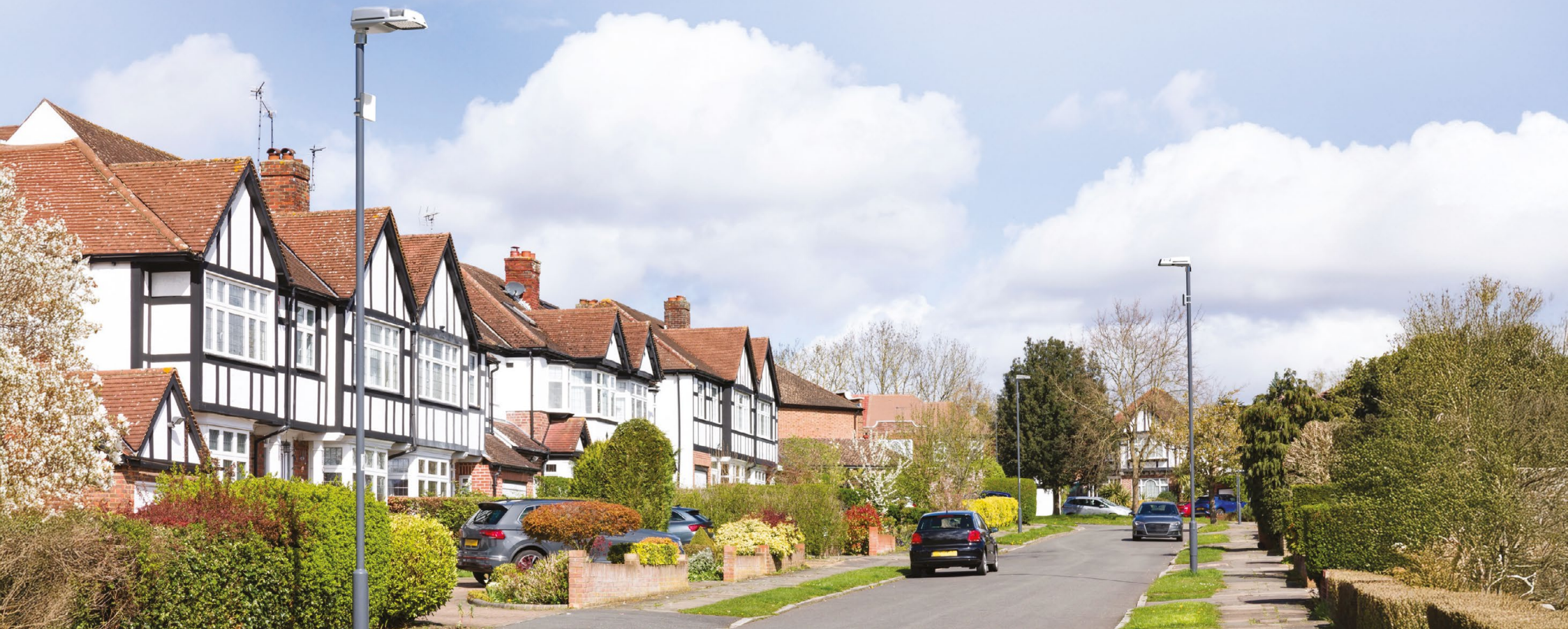
Enhanced network capacity: Localised coverage improves network performance in areas of high demand.

Accelerated deployment: Shared infrastructure reduces timelines and minimises costs.

Neutral hosting compliance: Adheres to Joint Operator Technical Specifications (JOTS) to facilitate seamless multi-MNO integration.

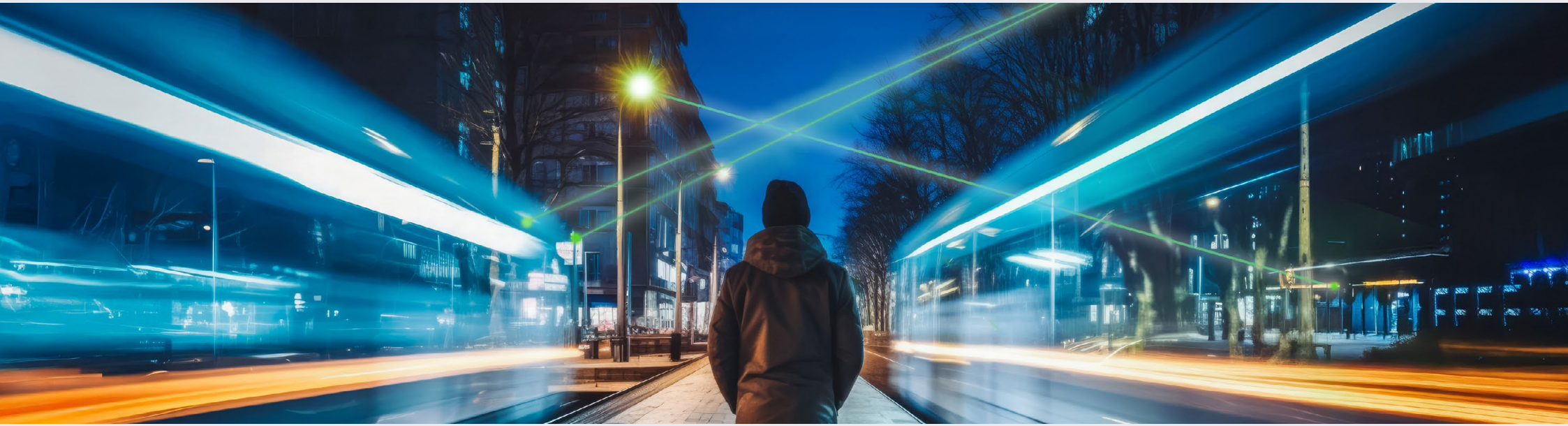
4G and 5G enablement: Optimised for next-generation use cases, such as IoT, edge computing, and smart city applications.

Sustainable deployment: By utilising existing public infrastructure, we support net-zero ambitions while minimising visual impact.



SMALL CELL COVERAGE SOLUTIONS

Why Small Cells for MNOs?



COST EFFICIENCY

Sharing infrastructure reduces duplication and streamlines investments.

FASTER DEPLOYMENT

Coordinated efforts accelerate planning and ensure swift installations

REDUCED CLUTTER

By integrating small cells into existing assets, we minimise multiple installations, preserving urban aesthetics.

GREATER REACH

Neutral host solutions allow MNOs to boost capacity exactly where it's needed most.

OVERCOMING SIGNAL BLOCKERS

High-frequency technologies, like those used in 4G and 5G, struggle to penetrate buildings and trees. Small cells help bypass these challenges by complementing macro networks.

TECHNICAL LIMITATIONS

With high-frequency RF struggling to travel through certain materials, small cells are essential for providing coverage in hard-to-reach areas at ground level.

BUILDING CAPACITY

Small cells support networks under increasing pressure from exponential data demand, ensuring consistent performance in high-traffic areas.

MAINTENANCE & UPGRADES

These small-scale, distributed sites are easy to maintain, repair, and upgrade, ensuring continuous service and the ability to adapt to future network needs.

STRATEGIC PARTNERSHIPS

Our Collaboration Process

Our Small Cell Coverage Solutions are designed to support MNOs in delivering seamless connectivity by leveraging public sector assets. Strong collaboration with local authorities ensures access to prime locations, streamlined planning approvals, and efficient deployments. By working closely with these stakeholders, we help accelerate network rollouts while maintaining a community-focused approach. Now, let's explore how our key partners, Signify and Dense Air, contribute to making these solutions a reality.

cornerstone

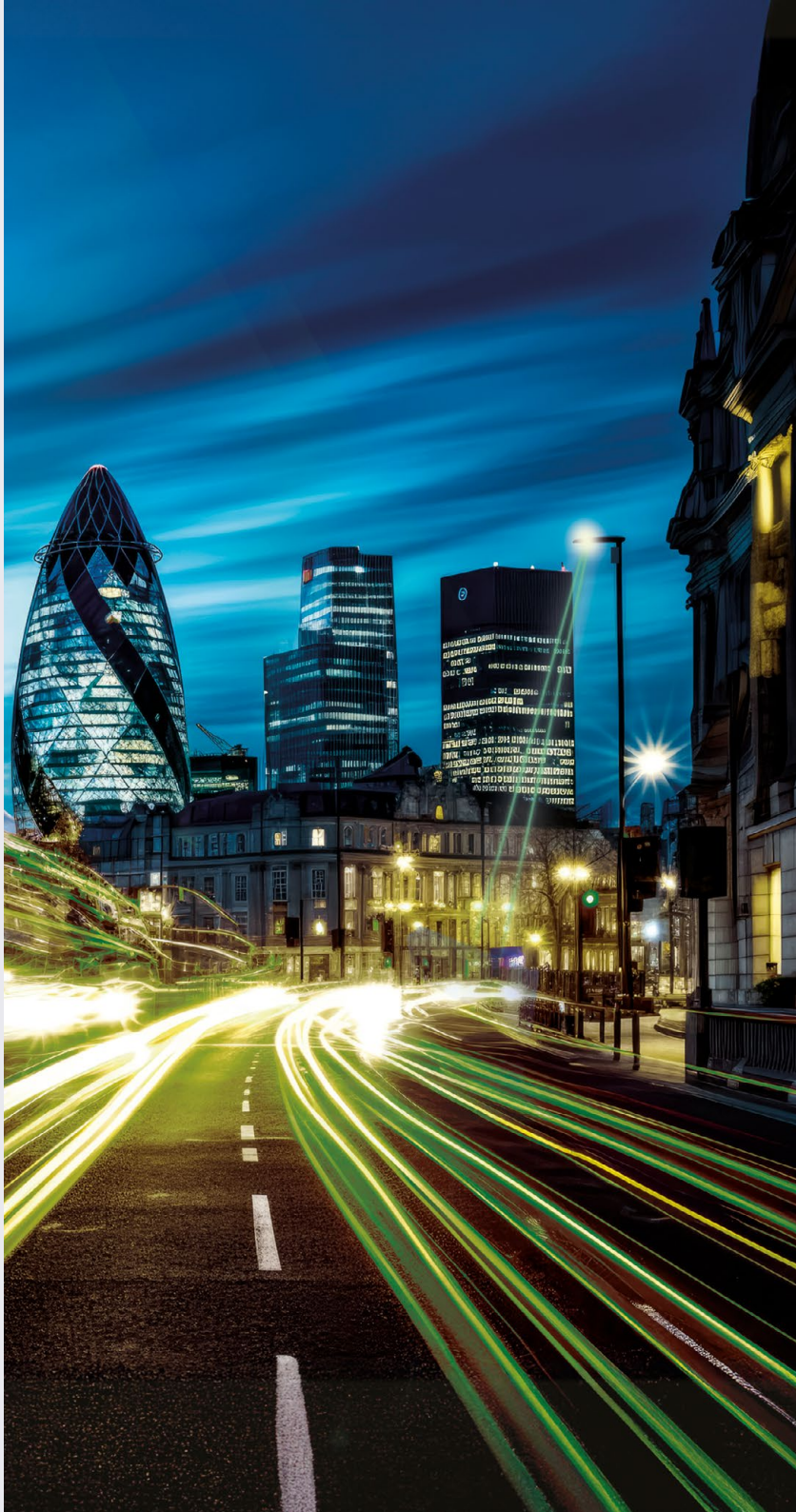
Cornerstone is the UK's leading mobile infrastructure services company, managing a portfolio of over 15,700 sites that provide vital connectivity across the country. As a trusted partner to Mobile Network Operators, local authorities, and the wider telecommunications industry, Cornerstone enables seamless communication by delivering innovative and sustainable infrastructure solutions. From traditional towers to cutting-edge small cell technology, Cornerstone ensures connectivity that supports economic growth, smart city development, and digital inclusion. Committed to collaboration and innovation, Cornerstone plays a pivotal role in shaping the future of the UK's digital landscape.

Signify

Signify is the world leader in lighting for professionals, consumers and the Internet of Things. Its BrightSites luminaire platform seamlessly integrates advanced lighting with mobile connectivity, transforming streetlights into multi-functional infrastructure that supports 4G and 5G networks. This cutting-edge integration simplifies deployment, reduces the need for additional ground-based equipment, and aligns with Cornerstone's commitment to sustainability and efficiency.

dense air

Dense Air acts as a neutral host service provider, enabling secure integration of infrastructure into MNO networks. They manage the multi-party, multi-domain networks through their neutral host platform, ensuring compliance with MNO service requirements. Dense Air also provides oversight for site qualification, interconnection, and continuous network monitoring to ensure optimal performance.



Collaborative Visions for a Connected Future

At Cornerstone, we are leading the way in transforming the UK's digital landscape with innovative solutions such as our Small Cell Coverage Solution. By integrating state-of-the-art technology into existing infrastructure, we're not only addressing the growing demand for seamless connectivity but also empowering local authorities, MNOs, and communities to thrive in the digital age. Our approach ensures faster, more sustainable deployments that enhance everyday life, drive economic growth, and set the standard for smart city innovation.

Miranda van Gestel
Chief Customer Officer, Cornerstone

By harnessing the power of 5G and IoT through our lighting technology, we not only illuminate streets but also pave the way for a more connected and sustainable future. In partnership with Cornerstone and Dense Air, we will enable our partners to tap into existing lighting infrastructure as a wireless network, bringing a new era of smart city solutions.

Khalid Aziz
SVP and Managing Director, BrightSites by Signify

We are delighted to be supporting this partnership, enabling Cornerstone and Signify to utilise their infrastructure to transform connectivity in cities across the UK. Our cellShare® platform as-a-service enables the secure and scaled rollout of small cells, supporting the growing demand for operators' services through a completely new economic model. This paves the way for a more efficient delivery of enhanced mobile services in the future.

Jim Estes
Chief Executive Officer, Dense Air

FAQs

01

How do small cells complement traditional mobile networks?

Small cells work alongside macro sites to enhance network performance. While macro sites provide wide-area coverage and support thousands of users, small cells improve capacity and coverage in high-demand areas or locations with technical constraints. They help strengthen the network but rely on macro sites for broader connectivity and backhaul.

02

How do small cells integrate with existing infrastructure?

Small cells are designed for seamless installation on existing public assets, such as lighting columns and signage. This approach minimises visual impact, streamlines deployment, and avoids the need for large-scale infrastructure projects, making it an efficient solution for urban and high-traffic environments.

03

Will small cells improve connectivity in targeted areas?

Yes. Small cells strengthen mobile coverage in areas with high demand or weak signal, delivering a better user experience for residents, businesses, and those on the move. They also support IoT growth and help overcome technical barriers, such as high-frequency signals struggling to pass through buildings or trees.

04

Do small cells align with sustainability and net zero goals?

Absolutely. By leveraging existing infrastructure, small cells reduce the need for new builds, lowering carbon emissions and supporting local net zero initiatives. This makes them a more sustainable approach to expanding network capacity.

05

What level of disruption can we expect during installation?

Minimal. Most small cell installations are completed within a single day, ensuring minimal disruption to local communities and businesses while rapidly enhancing connectivity.

06

What planning is required for small cell deployment?

Most small cell deployments fall under permitted development, allowing for faster implementation. However, we work closely with local authorities and communities to ensure full consultation and collaboration, creating a smooth and transparent deployment process.

Partner with Cornerstone for a Smarter Future

Interested in learning more about Cornerstone's Small Cell Coverage Solutions?

Contact us today to discuss how we can support your connectivity needs.

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