

London Mobile Connectivity Framework

Supporting better connectivity through leadership,
coordination and partnership

MAYOR OF LONDON

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Foreword

Over the last decade, London has transformed its digital infrastructure.

Through the Mayor's Connected London programme, City Hall, boroughs and industry partners have shown how working together can speed up investment in digital infrastructure. This includes:

- rolling out full-fibre across London
- improving connectivity across the transport network
- making public assets available for digital infrastructure
- creating new tools, and finding evidence, to support local decision-making.

Mobile connectivity is the next step. For years, discussions about mobile networks have tended to focus on coverage. But more and more, London's challenge is about performance and capacity.

Residents and businesses expect connectivity to work wherever they are: at home; on the move; at work; in town centres; and in new developments. As London grows and changes, meeting those expectations is becoming harder. Regeneration, housing delivery, changing patterns of demand and pressure on existing infrastructure: with these factors, decisions affecting connectivity are spreading further across planning, regeneration, housing, highways, estates and digital teams.

Mobile connectivity is no longer just a telecoms issue. As with transport, energy and water, it has become important for growth, public service transformation and innovation. The challenge is making sure that it is considered early enough, by the right people, in the decisions that shape places.

One of the lessons from Connected London is that progress rarely comes from a single intervention. It comes from organisations working together, with a shared understanding of the challenge. The boroughs making the greatest progress are rarely those with the biggest budgets. More often, they are the places where decision-makers think about connectivity early; and where responsibility is clear.

This framework reflects that and has been designed with boroughs and supported by the Mayor's Connected London programme for Londoners. It is not trying to recommend a single approach, or create new bureaucracy. Instead, it brings together evidence,

experience and practical actions, to help boroughs understand where they can make the greatest difference.

London has shown that when local government, industry and public sector partners work together, digital infrastructure can lead to wider change. Over the last decade, better connectivity has helped with innovation and economic growth. It's also transformed public services across the capital.

The next challenge is ensuring that mobile connectivity keeps pace with the needs of a growing and changing city. I hope this Framework brings connectivity into the decisions that shape London's future; and supports our ambitions for growth, inclusion, innovation and better public services.

Theo Blackwell MBE

Chief Digital Officer for London

Why this matters

London generally has mobile coverage; but that doesn't always translate into a good user experience. Residents and businesses are still reporting poor indoor signal, unreliable performance and congestion in some of the city's busiest locations.

Mobile networks are privately funded and operated; but boroughs' decisions can shape how easily infrastructure is deployed, upgraded and replaced. Decisions about planning, regeneration, asset management, highways and housing can all affect connectivity.

Many boroughs are already doing work that supports connectivity. This Framework suggests practical ways to make it easier to invest; and to improve how local government works together. It is not statutory guidance; it doesn't replace local decision-making; and it's not trying to prescribe a single approach. Instead, it gives a shared framework, to help boroughs understand where they can make the greatest difference.

As well as this Framework, we've also produced an independent evidence report; and an interactive mapping tool. These give boroughs a consistent evidence base, practical actions, and local insights to help with their decision-making.

Why leadership matters

Mobile connectivity is not owned by a single service area. Decisions that affect it are made across planning, housing, highways, estates, regeneration and economic development. Boroughs don't control where operators invest; but they shape many of the factors that make investment possible.

Without clear ownership, connectivity can easily sit between organisational boundaries. Leadership helps to make sure that it's considered with other infrastructure priorities. It also means that decisions made across different services can help connectivity outcomes, rather than holding them back.

Key questions for senior leaders

- Who owns mobile connectivity in our organisation?
- Which of the ten actions have already been implemented?
- Where are our current connectivity challenges?
- How are connectivity impacts considered in planning and regeneration decisions?

What the data shows

More and more, London’s connectivity challenge is about performance and capacity – rather than basic area coverage.

In many locations, a signal is available but residents and businesses experience poor indoor service; congestion at busy times; or inconsistent performance. These challenges are often linked to how networks perform under demand; and whether infrastructure has kept up with growth and redevelopment.

In the evidence report that goes with this Framework, we propose a new Capital Connectivity Standard (CCS). This is designed for dense urban environments; and draws on independent performance analysis. It found that traditional ways of measuring coverage do not always reflect how residents and businesses experience connectivity.

Connectivity problems often seem similar; but they can have very different causes. Understanding the cause helps in finding the best response. This Framework groups these problems into four broad categories.

What people say	Failure type	What’s happening	Most relevant framework actions
“I’ve got bars, but nothing works inside” Indoor calls drop, apps freeze, payments fail	Type 1: Structural signal gap	Signal reaches the area; but struggles to go through buildings, or provide a reliable indoor experience. This is increasingly affected by modern building construction, and network infrastructure.	Protecting existing infrastructure; finding suitable new locations; and making sure connectivity is considered as part of development and asset decisions. Actions 1, 2, 3, 7, 8
“Signal disappeared after that new building went up” Connectivity suddenly gets	Type 2: Development shadow	New development can block signals; displace existing infrastructure; or raise demand, without making connectivity improvements to match.	Early engagement between boroughs, developers and operators; and considering connectivity as part

worse following development		This can occur when connectivity is considered too late in the planning process.	of major development and regeneration programmes. Actions 5, 8, 9
“It’s fine early morning, but useless at busy times” Peak-time congestion, slow or frozen apps	Type 3: Capacity constraint	Demand for mobile services is more than the available infrastructure can handle. Signal may be present; but performance gets worse as networks become busy.	Supporting network upgrades; improving access to suitable infrastructure locations; and reducing barriers to deployment. Actions 3, 4, 6, 7, 10
“My friend’s phone works here, mine doesn’t” Experience varies sharply by network, even in the same place	Type 4: Operator asymmetry	Different operators have access to different infrastructure; and invest in different locations. As a result, user experience can vary significantly between networks in the same place.	Promoting fair access to infrastructure; and making sure local connectivity challenges, and opportunities, are easier to spot. Actions 2, 6

These challenges rarely occur in isolation.

A major development may displace infrastructure – which in turn creates a signal gap that later (as population and demand both go up) becomes a capacity constraint. Understanding the basic challenge can help find the solutions that are most likely to work.

How the Framework works



What good looks like

A borough with a good strategy knows that its role is not just to deliver mobile infrastructure itself. Rather, it is to create the conditions in which operators, developers and infrastructure providers can confidently invest.

These boroughs will have clear ownership of connectivity issues, and coordinated internal processes. They will make available assets easy for residents to identify. And they will understand how local decisions affect connectivity outcomes. They will recognise connectivity as a cross-cutting issue – one that affects planning, regeneration, housing, highways, economic development and place-making.

A borough that has a strategic approach to mobile connectivity typically:

- has clear senior sponsorship; and a named lead for connectivity
- coordinates its planning, highways, housing, estates and regeneration teams
- reviews its telecoms planning applications, so it can understand local trends and barriers
- makes sure residents can easily identify assets that could support digital infrastructure
- makes sure residents can easily identify infrastructure that is at risk of displacement or redevelopment
- embeds connectivity in major developments and growth programmes, from an early stage
- engages well with operators, infrastructure providers and developers
- can monitor progress and understand local connectivity challenges.

The ten actions

The ten actions focus on practical steps that can improve coordination; reduce avoidable barriers; and support better connectivity outcomes. Many require little or no additional funding – relying instead on clearer ownership; better coordination; and better use of existing information and processes.

Decisions relating to planning, assets, regeneration and infrastructure can support or constrain future investment. These actions aim to help boroughs create the conditions for investment; and avoid opportunities being missed unintentionally.

Some boroughs will already be taking some of these actions; others may choose to start with one or two. The objective is not to complete every action immediately; but to identify practical steps that strengthen local leadership, coordination and connectivity outcomes over time.

Actions at a glance

Leadership

1. Appoint a mobile connectivity lead
2. Collaborate across teams

Planning, assets and infrastructure

3. Create an asset register
4. Review telecoms planning performance
5. Establish regular operator engagement

Planning and growth

6. Assess developments through a connectivity lens
7. Streamline access to rooftop assets
8. Review infrastructure at risk of displacement
9. Include connectivity in growth and regeneration programmes

Monitoring and improvement

10. Report on performance annually

Action 1: Appoint a mobile connectivity lead

What: Name an existing officer as the single point of contact for mobile connectivity issues.

Why: Clear ownership improves coordination across planning, highways, housing, regeneration and estates teams. It also means operators and partners have a recognised contact.

How: Notify the relevant Sub-regional Digital Champion that an officer has been named; and ensure appropriate coordination across relevant services.

GLA support: Sub-regional Champions provide technical advice, operator engagement support and escalation routes.

Action 2: Collaborate across teams

What: Establish clear routes between teams likely to influence connectivity outcomes.

Why: Many connectivity issues arise because decisions affecting infrastructure are made in different parts of the organisation – so their wider impacts are harder to see.

How: For each service area, identify the officer most likely to be part of telecoms-related decisions. Ensure there are clear routes to escalate issues, and coordinate work, before connectivity-related decisions are made.

Connectivity decisions are often influenced by the following:

- **Highways:** flag roadworks, street furniture projects and ducting opportunities that could support digital infrastructure.
- **Estates and asset management:** flag proposed notices to quit, tenancy changes and asset disposals affecting telecoms infrastructure.
- **Housing:** flag redevelopment, refurbishment or estate projects affecting buildings that host telecoms equipment.

- **Planning:** flag major developments, telecoms applications, and places where connectivity may be affected by development.
- **Legal:** flag new or renewed wayleaves, asset agreements and Electronic Communications Code matters.
- **Economic Development and Regeneration:** flag Opportunity Areas, regeneration schemes and major developments where connectivity has not yet been considered.
- **Digital and IT:** flag connectivity procurements, contract renewals and projects that could inform wider borough connectivity objectives.
- **GLA support:** briefings for each department – for example, governance arrangements and support from Sub-regional Champions.

Action 3: Create an asset register

What: Create a simple register of council-owned assets that could support digital infrastructure.

Why: Making assets more visible helps boroughs respond to operator enquiries, identify opportunities and understand the infrastructure that's at risk.

How: Record rooftops, street furniture and existing telecoms sites – including any relevant constraints or redevelopment plans.

GLA support: Facilitate introductions, and share examples of best practice undertaken by London boroughs that have progressed this action to the next stage.

Action 4: Review telecoms planning performance

What: Understand how telecoms applications are performing within your borough.

Why: Planning decisions can influence connectivity outcomes. Understanding local approval rates, refusal patterns and application quality can help to avoid obvious barriers, while maintaining appropriate planning standards.

How:

- Review telecoms application approval rates over the last two years.

- Review the last 10 telecoms refusals, and identify any recurring themes.
- Consider whether refusals are mainly about legitimate siting, design, heritage or amenity concerns; or whether there are other issues (such as poor engagement, incomplete information or process failures).
- Review whether operators and their agents are following the principles set out in the Code of Practice for Wireless Network Development.
- Identify any recurring issues that could be addressed through earlier engagement, better information-sharing or clearer local processes.
- Share findings with your Sub-regional Partnership and the GLA to help identify London-wide trends and barriers.

GLA support: The Operator Engagement Forum will provide a route for discussing planning and deployment trends, identifying common barriers and sharing lessons learned between boroughs and industry.

Action 5: Establish regular operator engagement

What: Establish a regular dialogue with operators about future investment intentions.

Why: Making operator plans visible, at an earlier stage, helps boroughs make sure connectivity matches up with their growth, regeneration and infrastructure programmes.

How: Establish a regular dialogue with operators on plans for deployment, investment priorities and emerging infrastructure needs over the next three years. This is particularly important in Opportunity Areas; regeneration programmes; and places where infrastructure may be at risk.

GLA support: Template engagement materials and introductions through the Operator Engagement Forum.

Action 6: Assess development applications through a mobile connectivity lens

What: Consider connectivity impacts during major development proposals.

Why: New development can affect existing infrastructure, future network capacity and resident experience.

How: Ask how connectivity has been considered, what existing infrastructure may be affected and what provision is proposed for future needs.

GLA support: London Plan policy guidance, Digital Connectivity Infrastructure Guidance and planning support where required.

Action 7: Streamline access to rooftop assets

What: Adopt a more standardised approach to telecoms agreements and site access across your property portfolio.

Why: Consistent processes and documentation can reduce administrative burden, provide greater certainty for operators and speed up the deployment of mobile infrastructure.

How: Consider using standard heads of terms, framework agreements or other repeatable processes to reduce site-by-site negotiations. While individual sites will still require site-specific assessments and access arrangements, a common approach can streamline legal, commercial and operational processes.

GLA support: The GLA will work with boroughs and industry partners to develop a template agreement and share best practice to support a more consistent approach to telecoms deployments across London.

Action 8: Review infrastructure at risk

What: Ensure connectivity is considered before infrastructure is displaced by redevelopment or asset decisions.

Why: Losing strategic infrastructure can create long-term connectivity challenges.

How: Establish a review process before issuing notices to quit; or progressing redevelopment, refurbishment or asset disposal that may affect telecommunications infrastructure.

GLA support: Guidance on infrastructure displacement and redevelopment considerations.

Action 9: Include connectivity in major growth and regeneration programmes

What: Treat connectivity as part of major growth, regeneration and place-making activity.

Why: Considering connectivity early is usually easier and cheaper than addressing issues later.

How: Include connectivity within Opportunity Areas, growth programmes and major regeneration schemes. Where appropriate, bring developers, operators and infrastructure providers together early in the design process. This can help to identify connectivity requirements, infrastructure risks and opportunities for deployment.

GLA support: Connectivity evidence, mapping and Opportunity Area support.

Action 10: Report on performance once a year

What: Review local connectivity performance and report progress annually.

Why: Regular reporting helps to keep connectivity issues visible; track progress over time; and see where further intervention may be required.

How:

- Review borough-level connectivity data provided by the GLA.
- Report progress against the actions in this Framework.
- Draw attention to strategic barriers and issues through the Operator Engagement Forum.

GLA support: The GLA will provide borough-level connectivity data, supporting analysis and a simple reporting template. Findings will be used to drive discussions at the Operator Engagement Forum; see where the same challenges come up across London; and shape future guidance, support and advocacy.

What the GLA will do

This Framework aims to help the GLA deliver commitments set out in:

- the [Mayor's Upgrading London's Infrastructure programme](#)
- the [London Infrastructure Framework](#)
- the [London Growth Plan](#).

Together, these documents recognise that mobile connectivity is essential for growth, regeneration and public-service delivery.

London's approach builds on nearly a decade of work through the Connected London programme, and other initiatives around digital infrastructure. The commitments below describe how the GLA will continue to support boroughs, industry and partners in improving connectivity outcomes across the capital.

- 1. Develop, maintain and publish a London evidence base.** The GLA will maintain a London-wide evidence base for mobile connectivity. This will contain performance data; borough intelligence; and industry engagement. Through regular assessments, boroughs can have a consistent understanding of local connectivity challenges, opportunities and progress over time.
- 2. Support borough delivery.** Through the Sub-regional Digital Champions programme, the GLA will give ongoing support to boroughs implementing this Framework. Champions will:
 - act as a first point of contact
 - provide specialist advice
 - maintain industry relationships
 - help identify barriers that require pan-London action.
- 3. Convene industry and local government.** The GLA will convene a quarterly Operator Engagement Forum, made up of boroughs, operators, infrastructure providers and other stakeholders. The Forum will be a way to discuss strategic barriers; share evidence; identify opportunities for collaboration; and inform future Connected London priorities. Where specific issues require more detailed work, the Forum may set up time-limited working groups, focused on topics such as planning and deployment; growth and regeneration; public assets; and data and evidence.

- 4. Provide tools, templates and guidance.** The GLA will maintain a set of practical tools, and supporting materials, to help boroughs use this Framework. Resources will evolve over time, in response to borough feedback; industry experience; and recommendations from the Operator Engagement Forum. Available resources include asset register templates; model agreement clauses; borough briefing materials; and connectivity data tools.
- 5. Share good practice across London.** The GLA will identify and share examples of emerging practice from boroughs, operators and infrastructure providers. This means successful approaches can be used more widely across the capital.
- 6. Make public assets available for connectivity.** The GLA Group will keep supporting the use of publicly owned assets for mobile infrastructure, where appropriate. This includes TfL's work with Boldyn Networks and the Streetscape programme. These have shown how public assets can support improved mobile coverage and capacity. We will share lessons learned from these programmes with boroughs and industry partners.
- 7. Advocate for London.** The GLA will use the evidence from this programme to influence national policy; make digital infrastructure policy stronger for the next London Plan; and make the case for investment in London's mobile networks.

What industry should do

To improve mobile connectivity, there has to be action from local government, operators, infrastructure providers and developers. The Framework focuses mainly on borough actions; but industry also has an important role to play in improving transparency; building trust; and supporting effective deployment. The commitments below describe behaviours that can help create more productive relationships between boroughs and industry.

- 1. Provide a clear borough-facing point of contact.** Each operator should have a named contact who will engage with boroughs; and should share their details through the Operator Engagement Forum. This contact should enable strategic conversations; escalation of issues; and coordination across planning, property and deployment teams. This reflects the principle of clear points of contact (established through the Code of Practice). It can also help make sure boroughs' questions reach the right teams.
- 2. Share plans and engage early.** Operators can help boroughs in planning and decision-making, by engaging proactively with:
 - borough connectivity leads
 - Sub-regional Partnerships
 - other relevant teams.

This might relate to planned investment priorities; emerging infrastructure requirements such as utilising council buildings for rooftops or utilising street assets for small cell delivery; or strategic constraints. Engaging early can help boroughs understand future investment priorities; and identify opportunities, risks and constraints before proposals reach the planning stage.

Topics for discussion may include:

- planned deployment activity over the short, medium and long term
- Opportunity Areas, growth locations, regeneration programmes and major developments
- infrastructure at risk of displacement, redevelopment or notices to quit

- places where there are known connectivity challenges, which may require future intervention
- opportunities to use public assets; or incorporate connectivity into wider development activity.

Operators can also support better outcomes by engaging with developers and regeneration partners at an early stage. This helps to ensure connectivity considerations are taken into account before designs are finalised – and before infrastructure opportunities are lost.

Commercially sensitive information may remain confidential. But operators can support strategic planning by sharing enough information to identify opportunities and constraints, before the final investment decisions are made.

3. Support effective deployment and planning. Operators can support a transparent and constructive deployment process by keeping an open dialogue with borough teams, as proposals move through the various stages (acquisition, planning, design and delivery). This may include:

- explaining major changes to proposals
- sharing information on delivery constraints
- helping boroughs understand the connectivity challenges being addressed.

For proposals likely to attract significant public interest, operators can also support local engagement by sharing clear, plain-language information for elected members and communities. Through the Operator Engagement Forum, operators are encouraged to take part in an annual review of planning and deployment trends across London. This will help to identify the barriers that come up again and again; examples of successful delivery; and opportunities for improvement.

4. Participate in the Operator Engagement Forum. Operators are encouraged to take active part in the GLA's Operator Engagement Forum, and relevant working groups. Through the Forum, members can:

- identify strategic barriers
- share evidence
- discuss investment priorities
- improve collaboration between boroughs, industry and the GLA.

It's also a way to share lessons learned; and guide future London-wide connectivity priorities.

What national government should do

The actions in this Framework focus on areas where boroughs can have influence. However, for some connectivity challenges, local action isn't enough. Future policy and regulation should better reflect the realities of delivering mobile infrastructure in dense urban environments.

1. **Recognise dense urban connectivity as its own challenge.** National digital infrastructure policy has, rightly, focused on: extending coverage; and addressing areas where commercial investment, on its own, may not deliver connectivity. However, the challenges facing dense urban environments are becoming more and more varied.

Many of the issues raised in this Framework can be seen across other major city regions – including Greater Manchester, West Yorkshire, the West Midlands and Glasgow City Region. These places face similar pressures from:

- growing demand for network capacity
- infrastructure displacement caused by redevelopment
- competition for suitable sites
- the need to deliver infrastructure in complex urban environments.

As cities grow and redevelop, there is an increasing need for planning, regeneration and digital infrastructure policy to work together. Future national policy should recognise urban connectivity as a distinct challenge and support earlier consideration of connectivity impacts in major developments, regeneration schemes and infrastructure programmes.

2. **Develop measures that better reflect the urban experience.** Most national mobile reporting focuses on whether a signal is available. In dense urban environments, the question is increasingly whether networks give a reliable and responsive experience under real-world conditions.

Drawing on independent performance analysis, the evidence report suggests using the CCS as a measurement framework for dense urban environments. The CCS moves beyond availability measures; it also considers the quality of experience for residents and businesses, including network performance, reliability and responsiveness.

The evidence shows that traditional coverage measures do not fully reflect how residents and businesses experience connectivity in dense urban environments. The principles underpinning the CCS were developed using evidence from London; but they are relevant across the UK, in areas that face similar challenges around performance, capacity and user experience.

The government, Ofcom and industry should explore how measures of performance, reliability and user experience could boost existing coverage reporting; and help fill in the picture of connectivity across the UK's cities and urban areas.

Conclusion

Mobile connectivity is now part of the core infrastructure that supports how residents access services; businesses operate; and places grow.

More and more, London's connectivity challenge is about performance and capacity, rather than basic geographic coverage. Addressing that challenge is becoming a matter of leadership and coordination, rather than technology alone.

Boroughs cannot control where operators invest; nor can they resolve every connectivity challenge by themselves. However, they influence many of the conditions that determine whether infrastructure can be deployed, upgraded and maintained. Decisions around planning, regeneration, housing, highways and asset management all play a role in shaping connectivity outcomes.

As such, the question is not whether boroughs are responsible for delivering mobile networks. It's whether connectivity is being considered early enough, by the right people, in the decisions that shape places.

The ten actions in this Framework aim to help boroughs answer that question. Some boroughs will already taking some of these actions; others may choose to start with one or two. The objective is not to make all boroughs behave in the same way. Rather, it's to ensure that connectivity is seen as a strategic infrastructure issue; and considered alongside other priorities for growth, regeneration and public service delivery.

Improving connectivity across London needs action from boroughs, industry, the GLA and national government. No organisation can deliver this alone. But through stronger leadership, better coordination and a shared commitment to creating the conditions for investment, London can keep improving connectivity; and bring wider benefits for residents, businesses and public services.

Appendices

Action Reference Card

Action	Effort	Impact	Lead team	Challenge types
1. Appoint a mobile connectivity lead	Low	High	- Digital - Corporate Centre	All
2. Collaborate across teams	Low	High	- Corporate - cross-council	All
3. Create an asset register	Medium	High	Estates and Asset Management	Types 1, 3
4. Review telecoms planning performance	Medium	Medium	Planning	Type 3
5. Establish regular operator engagement	Low	High	Connectivity lead	Types 2, 3
6. Assess development applications through a mobile connectivity lens	Medium	High	Planning	Types 2, 3, 4
7. Streamline access to rooftop assets	Low	Medium	- Estates - Legal	Types 3, 4
8. Review infrastructure at risk	Medium	High	- Estates - Regeneration	Types 1, 2
9. Include connectivity in growth and regeneration programmes	Medium	High	- Regeneration - Economic Development	Type 2
10. Report on performance once a year	Low	Medium	Connectivity lead	All

Connectivity challenge types

- Type 1 – structural signal gap. Signal exists but does not provide a reliable indoor experience.
- Type 2 – development shadow. Development impacts existing infrastructure or future connectivity.
- Type 3 – capacity constraint. Demand exceeds available network capacity.
- Type 4 – operator asymmetry. Different operators perform differently in the same location.

Glossary

Bars (signal bars)

The icon on a phone that shows the strength of the radio signal. Bars show how much signal there is, not whether the network will work well (especially indoors, or at busy times).

Capital Connectivity Standard (CCS)

London's benchmark for whether mobile networks are performing as well as a global city should expect. It looks at speed; upload capability; signal strength; and responsiveness (latency). It also goes beyond national minimums.

Capacity

How many people a mobile network can serve, at the same time, in a given area. An area can have good coverage but poor capacity – this leads to congestion at busy times.

Capacity constraint (Type 3 failure)

A situation where too many users share too little infrastructure. This causes peak-time congestion, slow responses and unreliable performance – even when speeds look fine at off-peak times.

Coverage

Whether a mobile signal has any presence in an area. Coverage alone does not indicate whether the service will actually be reliable or usable.

Development shadow (Type 2 failure)

When new buildings block, weaken or displace existing mobile infrastructure. If there's no infrastructure to replace or ease this effect, the area around the new building will have worse connectivity.

Densification

Adding more mobile infrastructure (typically small cells and better fibre connections) closer together to improve performance. This is essential in dense urban areas – even where there is already coverage.

Indoor penetration / indoor coverage

How well a mobile signal works inside buildings. Modern construction materials often block signal – this means outdoor coverage does not guarantee the device will work indoors.

Latency

How long the network takes to respond when data is sent. High latency makes services feel laggy or broken – particularly video calls, payments and real-time apps (these are apps that update information instantly, without the user having to refresh the page).

Loaded latency

Latency measured when the network is busy. This best reflects real-world experience at peak times in dense urban areas.

Macro site / macro mast

A traditional large mobile mast, usually on a rooftop or tall structure, covering a wide area. This is essential – but is rarely enough, on its own, to offer good connectivity in dense urban environments.

Notice to quit

A legal notice, requiring a mobile operator to remove equipment from a building or site (often due to redevelopment). Notices to quit can remove strategic infrastructure, and create sudden connectivity problems.

Operator asymmetry (Type 4 failure)

Where one mobile network works somewhere, but others do not. This is often because different networks don't have the same access to rooftops, street furniture or indoor infrastructure. User experience depends more on their network provider than the location.

Opportunity Area (OA)

Locations identified in the London Plan for high levels of growth in homes, jobs and infrastructure. In this framework, OAs are priority locations for treating mobile connectivity as essential infrastructure from the start.

Signal strength

A technical measure of how strong the radio signal is between a phone and the network. Stronger signal usually means more reliable service – but does not guarantee good performance under load (the demand being placed on a network).

Small cell

Compact mobile equipment attached to street furniture or building walls, covering a short range. Small cells are critical for improving indoor coverage, reducing congestion and lowering latency.

Structural signal gap (Type 1 failure)

This occurs when an area has coverage, but not enough signal strength – especially indoors – for reliable use. This is often caused by blocked signals, widely spaced masts or loss of existing infrastructure.

Street furniture

Objects and structures in public spaces – such as lamp columns, bus shelters and traffic lights – where mobile equipment can be placed. Access to street furniture is vital for improving capacity and indoor experience.

Wayleave

A legal agreement allowing telecoms equipment to be installed on land or buildings. Slow or complex wayleave processes delay network improvements.

Further reading and supporting guidance

National local government guidance

- Local Government Association (LGA), [Digital Connectivity Guide](#) (2026). Practical guidance for councillors and officers on how councils can enable fixed and mobile connectivity through planning, asset access and collaboration with industry.
- LGA, [A Councillor's Guide to Digital Connectivity](#) (2026). Plain-English overview of why digital infrastructure matters; common myths; and the role of elected members in supporting deployment.

Government and regulatory guidance (England)

- Department for Science, Innovation and Technology (DSIT), [Digital Connectivity Portal](#). Central guidance hub for local authorities, developers and network providers on removing barriers to putting broadband and mobile infrastructure in place.
- DSIT, [Digital and telecoms: resources for local authorities](#) (2018). Guidance covering planning; access to public sector assets; legislation (including the Electronic Communications Code); and digital leadership.
- Department for Digital, Culture, Media and Sport, [Code of Practice for Wireless Network Development in England](#) (2022). Agreed guidance for operators, planning authorities and communities on siting, design, consultation and good practice for mobile infrastructure.

London-specific planning and policy context

- GLA, [Digital Connectivity Infrastructure London Plan Guidance](#) (2024). Statutory planning guidance supporting London Plan Policy SI6. It includes expectations for development; how to reduce harm to existing infrastructure; and integrating mobile equipment into the public realm.
- GLA, [Connected London programme](#). Overview of the Mayor's programme to improve digital connectivity across London. It includes tools, data, borough support and engagement with industry.
- GLA, [London Fibre Connectivity Map](#). Interactive map showing estimated broadband availability across London by borough, ward and postcode.

Sub regional strategies and evidence (London)

- Local London and South London Partnership, [Sub-Regional Digital Infrastructure Strategy](#) (2023). Joint strategy commissioned by the GLA Infrastructure Coordination Service. It sets out how boroughs can collaborate at scale to unlock better fixed and mobile connectivity.
- Local London, [Digital Infrastructure Programme](#). Overview of Local London's programme to stimulate investment, reduce connectivity gaps and support boroughs through shared approaches to assets and engagement.
- South London Partnership, [Digital workstream](#). Focus on accelerating full-fibre and mobile connectivity across South London – including engagement with industry and central government programmes.
- FarrPoint (for South London Partnership), [Connectivity Gap Impact Assessment – South London Partnership](#) (2026). Evidence-led assessment of fixed and mobile connectivity gaps and their economic impact. This is used to support market engagement and investment decisions.

Practical borough focused examples

- BAI Communications, [Improving digital connectivity: a guide for London's boroughs](#) (2022). Practitioner-led insights from London boroughs on improving mobile connectivity – including asset access, planning and neutral host approaches.

London Mobile Connectivity Framework

executive briefing

Two things to remember

1. More and more, London's connectivity challenge is about performance and capacity, rather than basic geographic coverage.
2. Improving connectivity is increasingly a leadership and coordination challenge – rather than a purely technical one.

Why this matters

Most residents can access a mobile signal. But many still experience poor indoor coverage; unreliable performance; and congestion in busy places. As London grows and redevelops, these challenges are becoming more visible.

Mobile connectivity is now part of the infrastructure that supports:

- economic growth and productivity
- public service delivery
- regeneration and housing growth
- town centres and visitor destinations
- public safety and resilience

Why leadership matters

Boroughs do not build mobile networks; and cannot direct where operators invest.

However, they influence many of the conditions that affect whether infrastructure can be deployed, upgraded and maintained.

Connectivity decisions are often spread across:

- planning
- regeneration
- housing
- highways
- estates
- economic development.

Without clear ownership, connectivity can easily sit between organisational boundaries.

Key questions for senior leaders

- Who owns mobile connectivity in our organisation?
- Which of the ten actions have already been implemented?
- Where are our current connectivity challenges?
- How are connectivity impacts considered in planning and regeneration decisions?

Ten actions

Leadership

1. Appoint a mobile connectivity lead
2. Collaborate across teams

Planning, assets and infrastructure

3. Create an asset register
4. Review telecoms planning performance
5. Establish regular operator engagement

Planning and growth

6. Assess developments through a connectivity lens
7. Streamline access to rooftop assets
8. Review infrastructure at risk of displacement.
9. Include connectivity in growth and regeneration programmes

Monitoring and improvement

10. Report on performance annually

What support is available?

The GLA will:

- provide connectivity data at borough level
- support delivery through Sub-regional Digital Champions
- convene an Operator Engagement Forum
- provide tools, templates and guidance
- share good practice across London
- make public assets available for connectivity, where appropriate
- advocate for London nationally.

Operators should support boroughs by:

- providing a named borough contact
- sharing future investment priorities and constraints
- engaging early on major deployment activity
- participating in the Operator Engagement Forum.

Other formats and languages

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