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Building broadband and mobile infrastructure



Summary

- 1 How are telecoms networks built?
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- 3 Access to land
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- 5 Access to existing infrastructure

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Summary

Ensuring the wide availability of next generation broadband and mobile connectivity has been a priority for successive governments. Most of the new and upgraded infrastructure needed to meet these targets will be deployed through private investment. Enabling the fast and cost-effective roll-out of telecoms infrastructure by industry is therefore an important policy objective for the government.

This paper explains the rules and permissions needed to build broadband and mobile infrastructure and discusses reforms intended to make building this infrastructure easier.

Who decides where to build mobile and broadband infrastructure?

Broadband and mobile telecommunications networks in the UK are rolled out by private companies, commonly referred to as ‘operators’.

Telecoms operators take decisions about where and when to roll-out infrastructure based primarily on commercial considerations. Publicly funded schemes support deployments in areas that would otherwise not be commercially viable. Information on these schemes can be found in the Library briefings, [Gigabit broadband in the UK](#) and [Rural mobile coverage in the UK](#).

What permissions are required to build telecoms infrastructure?

The same general rules for installing telecoms equipment apply to both broadband infrastructure (such as cables and cabinets) and mobile infrastructure (such as masts and antennae).

To install infrastructure, telecoms operators may require:

- planning permission
- the landowner’s permission
- permission to conduct street works.

Telecommunications is a reserved matter, meaning that overall policies and targets are set by the UK Government. Some aspects of infrastructure building, such as planning and building regulations, are devolved responsibilities and vary slightly in each nation. Others, such as the rules on access agreements, apply UK-wide.

Planning rules and consultation requirements

Telecoms operators have certain [permitted development rights](#). This means they can build or alter specified communications infrastructure without having to apply for planning permission from the local planning authority. A full application for planning permission is required for any telecoms infrastructure that is not covered by permitted development rights.

Some infrastructure that is covered by permitted development must go through a slimmed-down planning process called ‘prior approval’. This includes mobile phone masts. The prior approval process gives local authorities time to assess whether the proposed infrastructure meets certain criteria set out in permitted development legislation. For some other forms of infrastructure, such as telegraph poles, operators are not required to apply for prior approval either.

Further detail can be found in the Library’s briefings, [Planning rules for 5G masts in England](#) and [Broadband companies and telegraph poles](#).

Access to land

The [Electronic Communications Code](#) (ECC) grants telecoms operators rights to use land for the purpose of building and maintaining a communications network. To exercise these rights on land other than public highways they need permission from the relevant landowner/occupier. Wayleaves and leases are the most common forms of access agreement for telecoms infrastructure. They are private legal agreements between the two parties.

Access agreements are usually entered into consensually between the parties. However, if an agreement cannot be reached consensually, the ECC allows telecoms operator to apply to the courts to have an agreement imposed.

Reforms to the Electronic Communications Code

Reforms to the ECC have always been highly contested as it involves balancing digital connectivity and property rights. Both the [mobile industry](#) and [property owner organisations](#) have campaigned on the issue.

One significant reform implemented in 2017 was to change the way that rent for hosting telecoms equipment on private land is calculated when the court is imposing an agreement. Rent is now calculated based on the value of the land to the landowner, rather than the value to the operator (called ‘no-scheme valuation’).

Other changes to the ECC since 2017 have included reforms intended to make it easier for telecoms companies to upgrade infrastructure (for example adding new 5G equipment to an existing mast) and to share physical infrastructure with other operators, both without needing a new agreement with the landowner.

The [Library briefing on the Product Security and Telecommunications Infrastructure Act](#) covers the reforms in detail.

Street works

The ECC gives telecoms operators a general right to conduct street works. They need to apply for a permit to carry out works, which helps local authorities reduce disruption by coordinating street works being carried out by different organisations.

The telecoms industry has called on the government to introduce ‘flexi permits’ which would allow them to carry out works in a specified area for a specified period. Currently they must apply for one permit per street. While the [government has consulted on this proposal](#), local authorities have expressed concern about loss of control over street works in their area. A recent trial of flexi permits did not produce a definitive recommendation.

Accessing existing infrastructure

Instead of laying a new underground duct or building a new telegraph pole, it can be possible for operators to use existing ducts and poles. Infrastructure sharing reduces the time and cost of network deployment, as well as the impact on the local community. Using existing infrastructure requires the agreement of its owner (often a competitor telecoms operator).

Two broadband operators have a legal obligation to share their physical infrastructure with competitors because they are former monopolists: Openreach (in the UK apart from Hull) and KCOM (in Hull).

Other operators do not have an equivalent sharing obligation. The [Access to Infrastructure Regulations](#) require infrastructure owners (including utilities) to consider access requests, which can only be rejected on objective and transparent grounds. However, the process is more time-consuming than Openreach’s.

1 How are telecoms networks built?

Telecommunications networks include a range of different types of infrastructure including:

- Fixed-line broadband network infrastructure such as telegraph poles, cabinets, and cables.
- Mobile network infrastructure such as ground-based masts and antennae on buildings.

Telecommunications networks in the UK are rolled out by private companies, referred to as ‘operators’ in this briefing. They decide where to build network infrastructure based primarily on commercial considerations.

Telecommunications is a reserved matter, meaning that overall policies and targets are set by the UK Government. However, some aspects of infrastructure building, such as planning and building regulations, are devolved responsibilities and vary slightly in each nation. Others, such as the rules on access agreements, apply UK-wide.

This briefing covers practical aspects of deploying telecoms networks, focusing on the permissions that operators need to secure and their responsibilities regarding consultation and cooperation with local authorities and residents. Information on the government’s wider policies, targets, and funding for new telecoms networks can be found in the following House of Commons Library briefings:

- [Gigabit broadband in the UK: Government targets, policy, and funding](#)
- [Rural mobile coverage in the UK: Not-spots and partial not-spots](#)
- [5G in the UK](#)

1.1 Broadband infrastructure

Broadband network infrastructure includes ‘active’ elements such as cables and ‘passive’ or ‘physical’ elements such as the underground ducts through which cables are run. Openreach and Virgin Media O2 are the UK’s largest network operators. Openreach is the part of BT that is responsible for building and operating the group’s telecommunications network infrastructure. Virgin uses its separate television cable network to provide broadband services.

Internet service providers (ISPs) who do not build their own network infrastructure (such as Sky and TalkTalk) pay network operators for the use of their infrastructure. This allows them to offer broadband services to consumers.

Some network operators, such as Virgin Media, are ‘vertically integrated’, meaning that they also act as an ISP.

The gigabit broadband rollout

Most broadband connections in the UK today are provided through fibre-to-the-cabinet (FTTC) networks. FTTC technology use fibre optic cables to carry data from the exchange to street cabinets, then copper wires are used from the cabinet to individual premises. FTTC can provide ‘superfast’ broadband speeds, defined as over 24 megabits per second (Mbps). It is capable of download speeds up to a maximum of around 80 Mbps, but speeds drop the further the property is from the cabinet.

The industry is currently rolling out fibre-to-the-premises (FTTP) networks, where fibre cables are also used from the cabinet to the premises. FTTP is capable of speeds of over 1,000 Mbps. FTTP is also called ‘full-fibre’ or ‘gigabit’ broadband. Distance from the street cabinet does not affect speeds.

The government has a target for at least 99% of UK premises to have access to gigabit broadband by 2032.¹

Successive governments have seen enabling competition as the most appropriate way of rolling out gigabit broadband infrastructure.² The government and Ofcom, the UK telecoms regulator, have tried to reduce barriers to entry for alternative network operators (‘altnets’) to build full fibre networks in competition with Openreach. There have been reforms to the rules regarding planning permission, land access, infrastructure access, and street works, as discussed in this briefing.

As a result, in addition to Openreach’s plans to upgrade its copper network to full fibre, there are now numerous altnets building competing full fibre networks. The larger operators include City Fibre, Hyperoptic, and Gigaclear. There are many more operating on a local level, including Jurassic Fibre (south west England), Wight Fibre (Isle of Wight), and Ogi (south Wales).

Detailed rollout plans are not publicly available, although Openreach has [published its plans](#). For information on where gigabit broadband is being rolled out under the government’s public subsidy programme, Project Gigabit, see the House of Commons Library briefing, [Gigabit broadband in the UK: Government targets, policy, and funding](#).

¹ Commons Library, [Gigabit broadband in the UK: Government targets, policy, and funding](#), 16 April 2026

² DCMS, [Future Telecommunications Infrastructure Review](#), 23 July 2018

1.2

Mobile infrastructure

Mobile infrastructure largely consists of phone masts and their associated equipment, such as antennae.³

There are four Mobile Network Operators (MNOs) in the UK that own and operate mobile networks: EE, O2, Vodafone, and Three.

Vodafone and Three [completed a merger in May 2025](#) and are in the process of consolidating their networks.

Other mobile companies, such as GiffGaff and Tesco Mobile, use the network infrastructure operated by one of the four MNOs. They are known as Virtual Mobile Network Operators.

There are also wholesale infrastructure providers that build mobile infrastructure and lease it to MNOs. [These are sometimes referred to as 'towercos' \(tower companies\).](#)

There are several factors that impact a suitable location for a mobile mast, and the challenges differ between urban and rural areas.

- A mobile mast must be in a location where it can provide coverage to a reasonable area. In rural areas, trees and natural landscape features can block the antenna's signal. In urban areas, buildings are more likely to get in the way. The higher the antenna, the more obstacles its signal can reach over.
- The land area must be large enough to support the mast. This can be a challenge in urban areas, although operators may be able to place equipment on the rooftops of buildings.
- Masts need access to a power supply and a high capacity fibre broadband or radio link to connect the mast to the main network (called backhaul). This can be complicated and expensive in remote rural areas.
- Low population densities in rural areas can diminish the commercial returns that operators receive from extending their network. This makes the business case for investment in infrastructure more challenging for rural areas.

MNOs publish coverage maps on their websites. However, detailed maps showing where mobile infrastructure is located and future rollout plans are not generally available to the public.

³ For an overview of the different parts of phone masts, see Vodafone, [Mobile phone masts: Everything you need to know](#), 29 September 2021

1.3

What permissions are needed to build infrastructure?

To install infrastructure, telecoms operators may require:

- Planning permission.
- An access agreement with the landowner to use the land, such as a wayleave or a lease.
- Permission to undertake street works.

In general, the same framework of rules applies to both broadband infrastructure and mobile infrastructure. However, some rules will be more relevant to certain types of infrastructure. Street works are more of an issue for broadband builds, for example, and there are stricter planning rules for mobile masts.

The government's [Digital Connectivity Portal](#) provides information about building digital infrastructure, targeted at local authorities and industry. The portal provides practical guidance on topics such as [digital infrastructure strategy and leadership](#), [legislation and regulation](#), [local planning policies](#) and [access to public sector assets](#).

1.4

Reforms to make building infrastructure easier

Achieving the government's targets for broadband and mobile coverage requires substantial new infrastructure to be built by industry. Reforms to make building infrastructure easier form a key part of the previous and current government's strategy on the roll-out future digital infrastructure.⁴

Barriers to building infrastructure

In 2018, the Department for Digital Culture Media and Sport (DCMS) established a 'Barrier Busting Task Force', a cross-government group to address barriers to digital infrastructure deployment.⁵ 'Barrier busting' has focused on the following four areas:

- access to land
- street works

⁴ The government's strategy on future digital infrastructure is set out in the [Future Telecoms Infrastructure Review](#), 23 July 2018, and the [National Infrastructure Strategy](#), 25 November 2020

⁵ DCMS, [Future Telecoms Infrastructure Review](#), July 2018, pages 5-6

- new build connectivity
- supporting mobile roll-out (including through planning reform).⁶

Reforms introduced under the previous government include the following:

- In April 2022, planning reforms came into force in England allowing taller masts to be built under permitted development rights (see section 2).
- In May 2022, the Department for Transport responded to its consultation on street works reform. Some of the reforms designed to speed up infrastructure deployment were taken forward, but ‘flexi permits’ (which would cover multiple streets rather than just one) were not (see section 4).
- In September 2022, amendments to the building regulations were made that require new build residential properties to have gigabit-capable broadband infrastructure installed (see section 2).
- In December 2022, regulations implementing the [Telecommunications Infrastructure \(Leasehold Property\) Act 2021](#) came into force. The act provides a process whereby telecoms operators can gain permission to access apartment blocks to install infrastructure if the landlord has not responded to access requests (see section 3).
- In December 2022, the [Product Security and Telecommunications Infrastructure Act 2022](#) received Royal Assent. The act introduces reforms designed to, among other things, make it easier for operators to share and upgrade infrastructure (see section 3).

The current government is exploring further reforms to “unlock investment in mobile networks” through its [Mobile Market Review](#), launched in February 2026. It has introduced or proposed additional reforms:

- A December 2025 [consultation sought views on planning reforms](#), including allowing larger masts to be built under permitted development rights.
- Another December 2025 consultation proposed [granting leaseholders a statutory “right to request broadband”](#).
- A January 2026 consultation sought views on how to [simplify the process of installing telecoms infrastructure](#) in and on buildings covered by the [Building Safety Act 2022](#) regime.
- The Department for Transport (DfT) has continued to trial flexi permits for street works. It published an [evaluation of the trial](#) in April 2026, but did not make a definitive recommendation.

⁶ DCMS, [Barrier Busting Task Force: next steps](#), 19 March 2021

2

Planning and building regulations (England)

The installation of telecoms infrastructure, such as mobile masts and broadband cabinets, would normally count as development and therefore require planning permission.

However, telecoms network operators, like operators of other utilities, have certain permitted development rights.⁷ These are rights to make specified changes to a building or land without the need to obtain planning permission from the local planning authority (LPA). They derive from general planning permission granted by Parliament.⁸ Telecoms infrastructure that is considered permitted development includes broadband cabinets, telegraph poles, and mobile masts up to a certain height.

Planning is a devolved matter, and this section focuses on the rules in England. Similar permitted development rules exist in Scotland, Wales, and Northern Ireland, although the details differ. For example, in England and Scotland new ground-based mobile masts up to 30 metres in height can be covered by permitted development rights.⁹ In Wales, the maximum height is 25 metres.¹⁰ In Northern Ireland, new ground-based masts are not permitted development.¹¹

2.1

Planning consent

In England, permitted development rights for telecoms infrastructure are set out in [Part 16 of Schedule 2 to the Town and Country Planning \(General Permitted Development\) \(England\) Order 2015](#), as amended (the GPDO).¹²

The GPDO sets restrictions on permitted development rights. For example, whether a mobile mast falls under permitted development depends on its height, location, and whether the proposal involves building a new mast or

⁷ These permitted development rights apply only to communications network operators licensed under the [Electronic Communications Code Regulations 2003](#) by Ofcom.

⁸ For a wider discussion of permitted development in England, see the Commons Library briefing [Planning in England: permitted development and change of use](#)

⁹ Town and Country Planning (General Permitted Development) (England) Order 2015, Sch 2, Pt 16, A1(1(c)); [Town and Country Planning \(General Permitted Development\) \(Scotland\) Order 1992](#), Sch 1, Pt 20, para 67(3A)

¹⁰ [Town and Country Planning \(General Permitted Development\) Order 1995](#), Sch 2, Pt 24, A1(c)

¹¹ [Planning \(General Permitted Development\) Order \(Northern Ireland\) 2015](#), Sch 1, Pt 18, A1(e)

¹² Government guidance provides further information on [when planning permission is required](#).

upgrading an existing one. Following changes in April 2022, new ground-based masts up to 30 metres in (or up to 25 metres in protected areas such as conservation areas) are considered permitted development.¹³

Some types of infrastructure covered by permitted development rights (including mobile masts) still need a form of consent from the LPA called 'prior approval'. A full planning application is required for any telecoms infrastructure that is not covered by permitted development rights. Therefore, depending on type, location, and size, telecoms infrastructure may be subject to: planning permission, prior approval from the local authority, or just a requirement to notify the local authority.

1 Proposed changes to permitted development rights for mobile infrastructure in England

In December 2025 the government published a call for evidence seeking views on further reform of planning rules for telecoms infrastructure. The primary rationale for the consultation was that next generation standalone 5G networks will require upgrades to existing masts and new, smaller sites.¹⁴

The government sought views on:

- Extending the permitted development right for temporary mobile mast deployments from 18 months to 36 months.
- Allowing six masts to be installed per rooftop on 'protect land', up from three currently.
- Increasing the height limit for rooftop masts on smaller buildings (under 15 metres) from six to eight metres above the tallest part of the building.
- Increasing the maximum height of monopoles and masts.
- Increasing the maximum size in the definitions of 'small antennae' and 'small cells'

Development that requires planning permission

A full application for planning permission is required for any telecoms infrastructure that is not covered by permitted development rights. A project can only go ahead after the LPA has had the opportunity to consider the

¹³ See the government's two consultations: MHCLG and DCMS, [Proposed reforms to permitted development rights to support the deployment of 5G and extend mobile mast coverage](#), last updated July 2020; DCMS and MHCLG, [Changes to permitted development rights for electronic communications infrastructure: Technical consultation](#), last updated March 2022

¹⁴ That is because standalone 5G will typically use higher frequencies, which can carry more data but over shorter distances. See the Library briefing, [5G in the UK](#).

circumstances of the case, has consulted the local community (see section 2.2) and has decided to whether to approve the project.

An LPA must determine planning applications in line with their local plan, unless material considerations indicate otherwise.¹⁵ It will also take the government's [National Planning Policy Framework](#) (NPPF) into account when drawing up their local plans and deciding planning applications.¹⁶

Chapter 10 of the NPPF deals with communications infrastructure. It says planning policies and decisions should support the expansion of electronic communications networks, including 5G mobile technology.¹⁷

The NPPF says the number of new mobile masts should be “kept to a minimum” and the use of existing masts should be encouraged.¹⁸ However, local authorities should not “impose a ban on new electronic communications development in certain areas”.¹⁹

Permitted development subject to prior approval

Some telecoms infrastructure is considered permitted development but is subject to prior approval from the local authority. Prior approval is a slimmed-down version of the planning process where LPAs assess whether the proposal meets conditions specified in the GPDO. For telecoms infrastructure, LPAs will consider the siting and appearance of the development. The principle of the development (that is, the need for communications infrastructure) is not in question.

Prior approval applications should be determined within 56 days. An operator can carry out the development if the LPA does not respond in that period.²⁰

The government's [Code of practice for wireless network development in England](#) provides guidelines for the siting and appearance of telecoms infrastructure.²¹

¹⁵ [Section 70\(2\) of the Town and Country Planning Act 1990; Section 38\(6\) of the Planning and Compulsory Purchase Act 2004](#). The scope of what constitutes a material consideration is very wide; it is anything that is potentially relevant to a planning application. Government guidance provides further information on [determining planning applications](#). A local plan is a document in which a local authority sets out policies for the future development and land use of their area.

¹⁶ MHCLG, [National Planning Policy Framework \(NPPF\)](#), July 2021. There is also government guidance on how [local authorities can support digital infrastructure deployment](#) in their local plans.

¹⁷ MHCLG, [National Planning Policy Framework \(NPPF\)](#), July 2021, paragraph 114

¹⁸ MHCLG, [National Planning Policy Framework \(NPPF\)](#), July 2021, paragraph 115

¹⁹ MHCLG, [National Planning Policy Framework \(NPPF\)](#), July 2021, paragraph 116

²⁰ [Part 16 of Schedule 2 of the Town and Country Planning \(General Permitted Development\) \(England\) Order 2015](#), A3(8)

²¹ DCMS, [Code of practice for wireless network development in England](#), March 2022.

Permitted development with the requirement to notify

Some telecoms infrastructure, such as broadband cabinets and telegraph poles, does not usually require planning permission or prior approval.

However, an operator is required to give one month's notice to the LPA that they will install infrastructure in areas where they have not previously done so.²² LPAs can use this period to raise concerns and set conditions regarding the installation, but they cannot prevent the development.

2.2

Consultation requirements

LPAs are required to publicise planning applications and prior approval applications.²³ Minimum publicity requirements differ depending on the type of application.

Though not a legal requirement, a telecoms operator may also consult local residents prior to submitting an application. It might use site notices or notification letters to inform the community about the project and invite comments. Voluntary codes of practice for the deployment of [wireless infrastructure](#) and [telegraph poles](#) emphasise the importance of local consultation and engagement.²⁴

Development that requires planning permission

The consultation requirements for planning applications are set out in [Article 15 of the Development Management Procedure Order](#). In short, minimum publicity requirements include:

- a site notice or neighbourhood notification letter, and
- publicity on a website run by the local authority.²⁵

The notice must contain information about how interested parties can express their views on the application and within what time period (at least 21 days).²⁶

²² [Regulation 5 of the Electronic Communications Code \(Conditions and Restrictions\) Regulations 2003](#). The 2003 Regulations, and therefore the requirement to notify local authorities prior to setting up telecoms infrastructure, apply UK-wide.

²³ MHCLG, [National Planning Policy Framework](#), July 2021, paragraph 115

²⁴ DCMS, [Code of practice for wireless network development in England](#), March 2022, paragraph 73

²⁵ [Section 15 of the Town and Country Planning \(Development Management Procedure\) \(England\) Order 2015](#). Consultation requirements differ for development that would affect public rights of way (to which the [Wildlife and Countryside Act 1981](#) applies) or those that would affect the character of a listed building or appearance of a conservation area. Government guidance on [consultation matters](#) provides further information on publicity requirements (see Table 1).

²⁶ [Article 15 of the Town and Country Planning \(Development Management Procedure\) \(England\) Order 2015](#). The minimum time period for making comments on a planning application is 14 days where a notice is published in a newspaper.

LPAs are required to take public comments into account when deciding planning applications.²⁷

Permitted development subject to prior approval

The consultation requirements for prior approval applications are set out in [Part 16 of Schedule 2 of the General Permitted Development Order 2015](#). In short, minimum publicity requirements are a site notice or neighbourhood notification letter.²⁸ The government also encourages local authorities to consider “additional publicity for prior approval applications [...] to allow people likely to be affected by the proposed development to make their views known”.²⁹

As noted above, in a prior approval application LPAs can only consider specified matters (such as siting and appearance). Only public comments addressing these matters would be relevant to the decision.

Permitted development with the requirement to notify

Operators may be required to give 28 days’ notice to LPAs prior to installing infrastructure that does not require planning permission or prior approval.

LPAs can use this period to raise any concerns about the proposals. They may also set conditions that they wish the operator to comply with, although operators are not required to comply if they believe the conditions are unreasonable.³⁰ Ofcom is responsible for taking action if agreed conditions are not adhered to.

There is no legal requirement to consult communities.

2 Broadband companies and telegraph poles

Telegraph poles are a relatively quick and cost-effective way for broadband companies to deploy networks. However, they can also attract opposition from local residents who would prefer cables to be installed underground instead.³¹ The rules for building telegraph poles are discussed in the Library’s article, [Broadband companies and telegraph poles](#). In short:

²⁷ [Section 33 of the Town and Country Planning \(Development Management Procedure\) \(England\) Order 2015](#); Class A(A3) of [Part 16 of Schedule 2 of the General Permitted Development Order 2015](#)

²⁸ [Part 16 of Schedule 2 of the Town and Country Planning \(General Permitted Development\) \(England\) Order 2015](#). For development that would affect the right of way to which the [Wildlife and Countryside Act 1981](#) applies or development that is not in line with the local plan an advertisement in a local newspaper is also required.

³¹ See for example ISPreview, [Hedon and Preston Protestors Seek 10 Year Boycott of MS3’s Broadband Poles](#), 14 September 2023; ISPreview, [Brsk, FullFibre Ltd and IX Wireless Face More Pole Complaints](#), 6 October 2023

- Operators do not need planning permission but must give local authorities 28 days' notice before installing poles in a new area.
- Operators are not required to install cables underground if they are part of a broadband network.
- Operators are required to share infrastructure “where practicable”.
- Operators have a right to run cables between poles, including where the cable crosses private land.

MPs have raised constituents' concerns in Parliament, arguing that poles are being put up with “no consideration of the impact [they] can have on the daily lives of homeowners and the community”.³²

The current and previous government called on the industry to address concerns by updating its voluntary code of practice on deploying telegraph poles.³³ The [guidance, published in March 2025](#), includes a ‘community commitment’, which says the needs of local communities should “always be carefully considered during the design, construction and operational stages” of broadband network deployments. It also makes recommendations about how broadband providers can consider the visual impact of poles, minimise disruption, and improve communication with local communities.³⁴

Sir Chris Bryant, then the telecoms minister, said in a written statement that he was “grateful for the efforts of the industry, and trust that this new commitment ... will mean that communities can be confident that their needs are put first as the rollout of gigabit-capable connectivity continues”.³⁵

2.3

Mobile masts and public health

The antennae on mobile phone masts emit electromagnetic field (EMF) radiation. Public concerns about the health impact of EMF radiation are often a source of local opposition to new mobile network infrastructure.

The UK Health Security Agency (UKHSA) provides advice to the government on public health issues. Its guidance document, [Mobile phone base stations:](#)

³⁰ Electronic Communications Code (Conditions and Restrictions) Regulations 2003 as amended (for example by SI2016/1049, SI2013/1403 and SI2009/584)

³¹ See for example ISPreview, [Hedon and Preston Protestors Seek 10 Year Boycott of MS3's Broadband Poles](#), 14 September 2023; ISPreview, [Brsk, FullFibre Ltd and IX Wireless Face More Pole Complaints](#), 6 October 2023

³² [HC Deb 15 March 2023 vol 729 c934](#)

³³ DSIT, [Use of telegraph poles: letter from DSIT Minister to telecom operators](#), 15 March 2024

³⁴ ISPreview, [ISPA and INCA set out new UK guidance for deploying telegraph poles](#), 25 March 2025

³⁵ [WS548](#), 25 March 2025

[radio waves and health](#) (updated August 2021), provides an overview of the research that has been undertaken internationally on this issue.

UKHSA's main advice about radio waves from mobile base stations is that "health effects are unlikely to occur" if exposure levels are below the guidelines set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) (see Box 4 below).

Ofcom [tests EMF radiation at selected sites](#) across in the UK. In April 2020, it published the [results of testing at mobile sites in several UK cities](#), focusing on sites likely to see high mobile phone use. The study found that "EMF emission levels from 5G-enabled mobile phone base stations remain at small fractions of the reference levels for general public exposure in the ICNIRP Guidelines", with the highest level recorded for 5G "just 0.039% of the reference level".

Further information can be found in section 3.3 of the Library briefing, [5G in the UK](#).

Public health considerations and the planning system

The NPPF requires applications for new or upgraded masts to include "a statement that self-certifies that, when operational, International Commission (ICNIRP) guidelines will be met".³⁶

The NPPF does not allow local planning authorities to set health safeguards that are different to the ICNIRP guidelines.³⁷

As noted above, LPAs can only assess applications for prior approval on the grounds listed in the GPDO, which for mobile masts are the mast's siting and appearance. LPAs cannot object on health grounds if the proposed mast is within the ICNIRP guidelines.

Local authorities are also not permitted to impose blanket bans on new communications infrastructure in certain areas or "insist on minimum distances between new electronic communications development and existing development".³⁸

This has been the policy of successive governments. The first version of the NPPF, published under the Coalition Government in 2012, contains similar wording.³⁹ The predecessor to the NPPF, the Planning Policy Guidance series, said in 2001 that:

...it is the Government's firm view that the planning system is not the place for determining health safeguards. It remains central Government's responsibility to decide what measures are necessary to protect public health. In the Government's view, if a proposed mobile phone base station meets the ICNIRP

³⁶ MHCLG, [National Planning Policy Framework](#), 12 December 2024, para 122

³⁷ MHCLG, [National Planning Policy Framework](#), 12 December 2024, para 123

³⁸ MHCLG, [National Planning Policy Framework](#), 12 December 2024, para 121

³⁹ Ministry of Housing, Communities and Local Government, [National Planning Policy Framework](#), 27 March 2012, section 5

guidelines for public exposure it should not be necessary for a local planning authority, in processing an application for planning permission or prior approval, to consider further the health aspects and concerns about them.

...

In the Government's view, local planning authorities should not implement their own precautionary policies e.g. by way of imposing a ban or moratorium on new telecommunications development or insisting on minimum distances between new telecommunications development and existing development.

In Northern Ireland, new ground-based mobile masts are not permitted development unless they replace an existing mast. Although permitted development rights were updated in December 2020, this rule remained.⁴⁰

2.4 Requirements under the building regulations

Building work in England is governed by building regulations, under the [Building Act 1984](#) and the [Building Regulations 2010](#).⁴¹ The building regulations apply to new builds and, in some cases, to changes to existing properties. They apply at the time when building work takes place.⁴²

The building regulations are supported by [Approved Documents](#), which provide practical statutory guidance on how to comply with the technical requirements set out in the building regulations.⁴³

Gigabit broadband connection for all new builds

In the [Future Telecoms Infrastructure Review](#), the government said that broadband connectivity in new developments was “not as good as it should be” and that new builds “must be connected to fibre networks”.⁴⁴

In October 2018, following a proposal in the [Future Telecoms Infrastructure Review](#), the government consulted on amending the Building Regulations 2010 to “ensure delivery of gigabit-capable connections to all new build homes”.⁴⁵

The [Building etc. \(Amendment\) \(England\) \(No.2\) Regulations 2022](#), which came into force from 26 December 2022, require developers to supply new

⁴⁰ [Planning \(General Permitted Development\) \(Amendment\) Order \(Northern Ireland\) 2020](#) inserted a new Schedule 3 (setting out the permitted development rules for electronic communications) into the [Planning \(General Permitted Development\) Order \(Northern Ireland\) 2015](#).

⁴¹ [Building Act 1984](#); [Building Regulations 2010](#)

⁴² Further information on when the building regulations apply can be found in [MHCLG, Manual to the Building Regulations](#) (PDF), July 2020

⁴³ DLUHC and MHCLG, [Building regulations: Approved documents](#), last updated December 2021

⁴⁴ DCMS, [Future Telecoms Infrastructure Review](#), 23 July 2018, paragraphs 56-58

⁴⁵ DCMS, [New Build Developments: Delivering gigabit-capable connections](#), 29 October 2018

build developments with “gigabit-ready” broadband infrastructure up to a cost cap of £2,000 per dwelling.

The requirements apply to all new buildings that are, in whole or in part, intended for use as a residential dwelling. They do not apply to new dwellings created through a material change of use to an existing building (such as an office to residential conversion).⁴⁶ Listed buildings are consequently also out of scope, but new builds in conservation areas are covered (subject to local planning conditions).⁴⁷

[Approved Document R](#) provides guidance on how to comply with these requirements.⁴⁸

Telecoms news site ISPreview criticised delays in implementing the changes, adding that “the problem they were seeking to fix is no longer a significant issue”.⁴⁹ When the policy was proposed in the 2018 [Future Telecoms Infrastructure Review](#), approximately 72% of new homes had full fibre connectivity, based on data from thinkbroadband.com.⁵⁰ In the first half of 2022, an estimated 96% of new homes were built with full fibre.⁵¹

Building regulations are a devolved matter. Similar rules have been in force in Scotland since January 2025 and Wales since July 2025.⁵²

There is no equivalent requirement for mobile connectivity. The government asked in a December 2025 call for evidence about non-statutory options for “encouraging developers to consider mobile coverage and digital connectivity from the outset of design for new developments, including practical routes to engage operators early”.⁵³

Building Safety Act reforms

Under the [Building Safety Act 2022](#), works on higher risk buildings (defined as buildings over 18 metres high or at least seven stories, with two or more residential units) must be approved by the Building Safety Regulator (BSR), unless they are exempt. Those carrying out the works must maintain a ‘golden

⁴⁶ DCMS, [New build developments consultation: delivering gigabit-capable connections - government response](#), 22 September 2022

⁴⁷ DCMS, [New build developments consultation: delivering gigabit-capable connections - government response](#), 22 September 2022

⁴⁸ [Building etc. \(Amendment\) \(England\) \(No.2\) Regulations 2022](#); DLUHC and DCMS, [Infrastructure for electronic communications: Approved Document R](#), October 2022

⁴⁹ ISPreview, [Gov Finalise Rules Mandating Gigabit Broadband for New Build Homes](#), 23 September 2022

⁵⁰ Thinkbroadband, [New build premises superfast coverage still behind UK average](#), 5 November 2019

⁵¹ Thinkbroadband, [96% of new properties in 2022 have full fibre available](#), 15 June 2022

⁵² Scottish Government, [Building digital infrastructure](#), 20 September 2024; [Building etc. \(Amendment\) \(Wales\) Regulations 2025](#)

⁵³ DSIT and MHCLG, [Reforming planning rules to accelerate deployment of digital infrastructure](#), 18 December 2025

thread’ of information showing how the works comply with building regulations requirements.⁵⁴

MobileUK and the Internet Service Providers Association (ISPA) say the 2022 act and implementing regulations were developed without consultation with telecoms providers and impose requirements “entirely unproportionate for the types of works carried out by the sector”.⁵⁵ Both trade bodies say the BSR does not have the resources to deal with the volume of applications from telecoms operators, resulting in delays getting approvals and a “material slowdown” in the rollout of full fibre and 5G.⁵⁶

In January 2026 the government published a consultation in which it acknowledged the regime was imposing “unreasonable and disproportionate” requirements on “routine and essential” telecommunications works.⁵⁷ The consultation proposed to exempt certain works from some or all of the procedural requirements:

- Drilling holes through internal fire-resistant walls for the purpose of installing full fibre broadband cables.
- Installing or repairing building-based mobile masts.

⁵⁴ Building Safety Regulator, [Building control approval for higher-risk buildings](#), 1 April 2026; Commons Library, [Building regulations and safety](#), 8 July 2024

⁵⁵ House of Lords Industry and Regulators Committee, Written evidence from the Internet Services Providers Association (ISPA UK) ([BSR0023](#)), 4 September 2025; and, written evidence from the Mobile UK & Mobile Infrastructure Forum ([BSR0169](#)), 18 September 2025

⁵⁶ House of Lords Industry and Regulators Committee, Written evidence from the Mobile UK & Mobile Infrastructure Forum ([BSR0169](#)), 18 September 2025

⁵⁷ Ministry of Housing, Communities and Local Government, [Improving proportionality and safety outcomes in building control: telecommunications work](#), 27 January 2026

3 Access to land

Operators who want to build infrastructure on, under, or over land they do not own need permission from the landowner/occupier.⁵⁸ Permission will typically be in the form of a legal agreement whereby the occupier grants access rights in return for rental payments.

The previous government reformed the land access regime in 2017 and 2022 with a view to supporting the rollout of new telecoms networks. The current government has continued this approach.

Reforms to the ECC have been highly contested, as they need to balance the need for connectivity with property rights.⁵⁹ The previous government's reforms (which the current government has continued) were supported by the telecoms industry but opposed by site providers because they resulted in lower rents.

3.1 The Electronic Communications Code

The Electronic Communications Code (ECC) is the main law that governs the rights of telecoms companies to install infrastructure on private and public land. It applies UK wide. It was first introduced in 1984 to regulate landline telephone provision. It is contained in Schedule 3A to the [Communications Act 2003](#), as amended.⁶⁰

Code rights

The ECC [provides network operators with rights](#), called “code rights”, to install, operate, maintain, upgrade, and share (with other operators) electronic communications infrastructure on private and public land, and carry out associated works (such as connecting a power supply and cutting back trees).⁶¹

The ECC also grants rights to carry out works on public highways without a street works licence (see section 4 below), and to carry out works classed as

⁵⁸ The main exception to this is land that is a public road, as discussed in section 4 of this briefing.

⁵⁹ APPG for Broadband and Digital Communication, [Letter from Selaine Saxby, Chair, to Nadine Dorries, Secretary of State for DCMS](#), 3 November 2021 [downloads PDF]

⁶⁰ A comprehensive introduction to the ECC can be found in the Practical Law briefing note, [2017 Electronic Communications Code: overview](#). Subscription required. Practical Law is available to Parliamentary users via the [House of Commons Library website](#).

⁶¹ Communications Act 2003, Sch 3A, Part 1, paragraph 3

permitted development without planning permission (as discussed in section 2.1).

Operators must apply to Ofcom to be granted code rights. Ofcom publishes a [register of companies with powers under the ECC](#).

Apart from public highways and land they own, operators can only exercise code rights if they have an access agreement with the occupier of the land (usually the landowner).⁶² The ECC's list of code rights must be included in an access agreement.

Access agreements

The most common forms of access agreement for digital infrastructure are wayleaves and leases:

- A **wayleave** is a contractual agreement whereby a landowner grants a communications provider a licence to, for example, install, access and maintain equipment on their land in return for a rental payment. Wayleaves are usually open-ended and rent is usually paid annually or as a one-off payment.⁶³
- A **lease** confers occupational rights to a specific area of land or a building and is usually for a fixed period of time, with periodic rental payments.

Both are private legal agreements between the operator and the landowner.

Wayleaves are usually used for fixed-line broadband infrastructure while leases are more commonly used for mobile masts. More information is provided on the government's [Digital Connectivity Portal: Guidance on access agreements](#).⁶⁴

Ofcom has published a [Code of Practice](#) setting out how it expects parties to conduct themselves when negotiating agreements. In addition, Ofcom has also published examples of standard terms that might be included in an agreement.⁶⁵

While access agreements are usually negotiated consensually, if an agreement cannot be reached the operator can apply to the court to have one imposed. The powers of the court to impose an agreement are set out in Part 4 of the ECC. An agreement can only be imposed if the court considers that:

⁶² Communications Act 2003, Sch 3A, Part 2, paragraphs 9 and 11

⁶³ DCMS, [Guidance on access agreements](#), 20 December 2018

⁶⁴ DCMS, [Guidance on access agreements](#), 20 December 2018

⁶⁵ Ofcom, [Electronic Communications Code](#), 11 May 2018, accessed 9 January 2018

- the prejudice caused to the landowner/occupier by an imposed agreement is capable of being adequately compensated by money; and
- that the public benefit likely to result from the making of the order outweighs the prejudice to the landowner/occupier.

The landowner is still entitled to compensation from the operator if an agreement is imposed. The court would set the level of compensation according to the principles set out in the ECC (see section 3.3 below).

The Conditions and Restrictions Regulations

When exercising their rights under the ECC, operators must comply with the Electronic Communications Code (Conditions and Restrictions) Regulations 2003, as amended.⁶⁶ The regulations require operators to, for example:

- Consult or notify highway authorities, planning authorities, and other utilities in certain circumstances.
- Minimise, “so far as reasonably practicable”, the visual impact on properties (especially listed buildings), interference with traffic, and potential hazards.
- Share infrastructure with other operators “where practicable” (see section 5 below) and install the minimum practicable amount of infrastructure that is consistent with the provision of their telecoms service.
- Install cables underground where “reasonably practicable” (but this does not apply to broadband cables).⁶⁷

Ofcom is responsible for enforcing the 2003 regulations.

Landowners’ rights to object

Landowners can seek to terminate an access agreement on the grounds set out in [Part 5, paragraph 31\(4\) of the ECC](#):

- The operator has substantially breached its obligations or there have been persistent delays in making payments to the landowner.
- The tests enabling the courts to impose an agreement would not be met.
- The landowner intends to redevelop the land or neighbouring land and could not reasonably do so without terminating the agreement.

⁶⁶ [Communications Act 2003 s109](#)

⁶⁷ The exemption for broadband cables was [added in 2013](#) for a five-year period [to support the rollout of superfast broadband](#). It was [extended indefinitely in 2018](#) to support the rollout of gigabit broadband.

If the operator does not want to terminate the agreement it has three months to serve a counter notice, then another three months to take the matter to court.

Neighbouring landowners can also object to the presence of telecoms infrastructure. The procedure and grounds for objecting are set out in [Part 12 of the ECC](#). They depend on whether the objection was made within 12 months of the apparatus being installed, or after.

Ofcom has published ECC [template notices](#), including for objecting to telecoms infrastructure. However, it does not have a role in enforcement. Disputes about the ECC are a matter for the courts, not Ofcom.

Anyone considering legal action should first [seek professional legal advice](#).

3.2

Reforms to the ECC: Digital Economy Act 2017

A new Electronic Communications Code came into force on 29 December 2017, through the Digital Economy Act 2017.⁶⁸ The 2017 reforms followed several years of consultation and review, including several previous unsuccessful attempts at reform.⁶⁹

The 2017 ECC is a redrafting of the old ECC and contains many of the same provisions. Significant changes in the new ECC include changes to land valuation for imposed agreements, as well as reforms intended to make it easier for telecoms companies to upgrade existing infrastructure.⁷⁰

Rights to upgrade and share

The 2017 ECC added an automatic right for operators to upgrade existing equipment (for example by adding new 5G equipment to an existing mast) and to share their infrastructure (for example by allowing a mast to host antenna from another operator). In its consultation on the reforms, the government said that this would:

play an important role in enabling operators to quickly update their networks when new technology becomes available, and help facilitate more efficient use of infrastructure through greater sharing. Both of these impacts are likely to have a positive influence on investment, and ultimately lead to a better outcomes for the consumer over time.⁷¹

Operators can exercise these rights as long as they cause no more than a minimal adverse effect on the visual appearance of the infrastructure and

⁶⁸ For background information, see the Library briefing on the [Digital Economy Bill](#), 9 September 2016

⁶⁹ Commons Library, [Reforming the Electronic Communications Code](#), 1 June 2016

⁷⁰ Eversheds Sutherland: [the New Electronic Communications Code](#), 9 January 2018

⁷¹ DCMS, [A New Electronic Communications Code](#), May 2016, p17

impose no additional burden on the site provider.⁷² If those conditions are met the rights are ‘automatic’, in the sense that site providers cannot impose terms that restrict them or require additional money to be paid.

Land valuation

The 2017 ECC changed the way that compensation for hosting telecoms equipment on private land is calculated when the court is imposing an agreement.

Following the 2017 reforms, rent is calculated based on the value of the land to the landowner, rather than to the operator. This is a system based on compulsory purchase principles (“no-scheme valuation”) and is used for utilities such as electricity.

The proposal for no-scheme valuation was initially suggested by the Law Commission when it reviewed the ECC in 2013. The Law Commission rejected this options and proposed minor changes to the valuation regime to prevent excessive “ransom rents”.⁷³ However, the government decided to go ahead with the no-scheme valuation in the reformed ECC, arguing that while landowners should receive fair payment for the use of their land, this should not include a share of the economic value created by the demand for services provided by network operators.⁷⁴

For background information and commentary, see the Library briefing papers on the [Digital Economy Bill](#) and [Reforming the Electronic Communications Code](#).

Criticism of the 2017 reforms

Following the reforms, Farmers Guardian and ISPreview reported in 2018 that some telecoms companies were dramatically reducing the rents that they were offering to landowners.⁷⁵

Research by the Centre for Economics and Business Research, commissioned by site providers’ campaign group Protect and Connect, estimated that the 2017 reforms had cost site providers £209 million per year in revenues.⁷⁶ The government had estimated a £709 million fall in revenue over 20 years.⁷⁷

⁷² [Communications Act 2003](#), Sch 3A para 17

⁷³ The Law Commission, [The Electronic Communications Code](#), 27 February 2013

⁷⁴ DCMS, [A New Electronic Communications Code](#), May 2016, pp 14-15

⁷⁵ Farmers Guardian, [Digital Minister: Farmers being ripped off by telecoms providers an ‘outrage’](#), 4 October 2018; ISPreview, [Telecoms Disputes Over Wayleaves, Rents Threaten to Become Toxic](#), 17 December 2018

⁷⁶ Cebr, [Response to 2021 DCMS consultation on changes to the Electronic Communications Code: factsheet and executive summary](#), April 2021

⁷⁷ DCMS, [Government publishes proposals for a new Electronic Communications Code](#) – Regulatory Impact Assessment, 17 May 2016

The 2017 ECC reforms changed the way that rents are calculated, making it cheaper for mobile operators to rent land to host masts.

The Broadband Stakeholder Group and think tank Centre for Cities have both commented that one consequence of the reduced rents was that landowners were less willing to engage with operators, resulting in a ‘freeze’ on the market.⁷⁸ The Centre for Policy Studies, following a survey of the telecoms industry, estimated that 80% of negotiations were taking longer than the six months envisaged in the ECC, and that the average time for negotiations was 11 months.⁷⁹ Mobile industry stakeholders argued this was hampering the effectiveness of the reformed ECC and delaying mobile network roll-out.⁸⁰

In August 2018, the government, along with Mobile UK (the trade body for mobile operators), the Country Land and Business Association, and the Royal Institution of Chartered Surveyors, signed a [Joint Statement](#) on the reformed ECC.⁸¹ The statement recognised “problems with negotiations progressing” with the parties coming together to “reaffirm the commitments” made to the reformed ECC and to [Ofcom’s Code of Practice](#).

Both the mobile industry and property owner organisations established campaign groups calling for reforms to the 2017 ECC:

- [Speed Up Britain](#): a “cross-industry, non-partisan organisation campaigning for better mobile connectivity in every part of the UK”. It says that the 2017 ECC reforms have “encouraged disagreements” and led to “lengthy legal proceedings” causing delays to the roll-out and upgrades of existing telecoms sites. It called on the government to make changes to the ECC including to enable upgrading and sharing of sites and to allow an efficient renewal process for expired pre-ECC agreements.
- [Protect and Connect](#): a campaign led by land owners who lease their land to telecoms companies. It is part funded by AP Wireless, a telecoms lease management firm. Protect and Connect argued that telecoms operators were using the reformed ECC to push down rents such that property owners are not getting a “fair deal.” They called for the government to reconsider the ‘no scheme’ valuation approach.⁸²

⁷⁸ Analyst Masons, [Lowring the Barriers to 5G Deployment](#), Report for the Broadband Stakeholder Group, 20 July 2018; Centre for Cities, [Delivering change How cities can make the most of digital connections](#), July 2018

⁷⁹ Centre for Policy Studies, [Upwardly Mobile: How the UK can gain the full benefits of the 5G revolution](#), 1 October 2021

⁸⁰ Speed Up Britain, [The Problem](#) [accessed 29 April 2021]; Mobile UK, [Future Telecoms Infrastructure Review is a positive step but it is deadlines that will achieve its goals](#), July 2018

⁸¹ DCMS, MobileUK, Country Land and Business Association, Royal Institution of Chartered Surveyors, [Joint Statement on the reformed Electronic Communications Code](#), 22 August 2018

⁸² CityAM, [We can’t connect to 5G if it strips away property rights](#), 10 August 2022

3.3

Further reforms: the Product Security and Telecommunications Infrastructure Act 2022

In January 2021 the government opened a [consultation on potential further reforms to the ECC](#).⁸³ The government acknowledged that since 2017 it had received “regular reports” that the reforms to the ECC were “not having their intended effect. The government was clear that it did not intend to revisit the 2017 valuation framework, saying difficulties negotiating agreements were, in part caused by other factors:

2.13. The Government’s policy position on this valuation regime has not changed. We still believe that underpinning negotiations with the valuation model (i.e. that set out in paragraph 24 of the Code) is appropriate for the installation and maintenance of digital communications infrastructure systems. **We do not intend to revisit the valuation framework contained in the Electronic Communications Code.**

2.14. We do not think that disagreements about financial terms are the **only** reason that negotiations are not progressing as smoothly as they could be. Other issues have been brought to our attention, including: non collaborative behaviour or poor communications by operators, occupiers and professional representatives; a lack of trust between negotiating parties; and concerns about ensuring both parties adhere to the terms of a completed agreement.⁸⁴

The Law Society commented that the government’s proposals for ECC reform focussed more on “symptoms” of the problems encountered, rather than addressing the “root causes,” which they said stemmed from the balance of rights in the ECC being “too heavily in favour of operators.”⁸⁵

The government’s response to the consultation on ECC reform was published on 24 November 2021. On the same day, the [Product Security and Telecommunications Infrastructure Bill](#) was introduced to Parliament to implement some, but not all, of the ECC reforms proposed in the January consultation. It received Royal Assent on 6 December 2022.

The main changes to the ECC introduced by the PSTI Act 2022 were:

- New provisions to actively encourage alternative dispute resolution rather than legal proceedings.
- A new procedure to allow operators to gain access to land in circumstances where an occupier is unresponsive.

⁸³ DCMS, [Consultation on changes to the Electronic Communications Code](#) 27 January 2021; press release: [Government reviews law on access to land for digital infrastructure](#)

⁸⁴ DCMS, [Consultation on changes to the Electronic Communications Code](#), 27 January 2021, paragraph 2.13-2.15

⁸⁵ The Law Society, [Changes to the Electronic Communications Code – Law Society response](#), 20 April 2021

- To allow expired agreements to be renewed on terms more closely aligned to the 2017 reforms, including on land valuation.
- To extend the reformed ECC's automatic rights to upgrade and share apparatus to apply retrospectively to code agreements entered into before 2017.

The [Library briefing on the act](#) covers these reforms in more detail.⁸⁶

The current government has continued this approach to land access, including land valuation. In May 2025 it consulted on regulations to implement section 61 to 64 of the PSTI Act, which would extend the 2017 ECC's approach to land valuation to agreements signed under different legislation.

Site providers including AP Wireless, the National Farmers Union, and the Country Land and Business Association, called on the government to conduct a formal review of the 2017 reforms before further implementing the 2022 act. They argued that landowners were “increasingly unwilling to host infrastructure”, adding that “where there is no land available, rollout simply does not happen”.⁸⁷ They surveyed 500 landowners and found that 35% were considering terminating their mast hosting agreement, citing “rent cuts, legal pressure and loss of trust.”

By contrast, the Mobile Infrastructure Forum, an industry group, has said that the ECC reforms are “working as intended, with high rates of consensual agreements and minimal litigation”.⁸⁸ Trade body MobileUK say the reforms have made a “very positive” contribution to mobile network rollout.⁸⁹

The government says it has “taken the view that the 2017 Reforms were necessary to support faster, more cost-effective rollout of telecommunication networks”. It has “no plans to conduct a formal review of the 2017 reforms”.

3.4

Fibre-broadband to leasehold properties

Even with ECC rights, operators have reported they face administrative barriers getting access to land, particularly for leasehold properties with unknown, unresponsive, or unwilling landlords.⁹⁰ Operators need the

⁸⁶ House of Commons Library, [The Product Security and Telecommunications Infrastructure Bill](#), 25 October 2022

⁸⁷ Times, [Landowners say phone mast rent cuts threaten 5G rollout](#), 9 June 2025; NFU, [Mobile mast rents and government reforms – are you affected?](#), 14 August 2025

⁸⁸ Mobile Infrastructure Forum, [5G Rollout at Risk - MIF welcomes Government Consultation while highlighting urgent need to fully deal with 6,200 sites stuck in legislative limbo](#), 21 May 2025

⁸⁹ MobileUK, [Response to the Mobile Market Review call for evidence](#) (PDF), May 2026

⁹⁰ DCMS, [Future Telecoms Infrastructure Review](#), 23 July 2018, para 52-53; Openreach, [The blueprint for a full-fibre future](#), October 2019 [accessed 10 January 2020]

landlord's agreement (under the ECC) to access communal parts of the building.

When delivering broadband to a multi-dwelling unit (MDU, such as a block of flats) operators may need the landlord's consent to enter communal parts of the building. Broadband operators have said [landlords can be difficult to identify, unresponsive, or reluctant to grant access](#). An industry group, the Independent Networks Cooperative Association (INCA), has said that [gaining access to MDUs is "the most problematic and time consuming"](#) part of deploying networks.

Difficulty gaining access to MDUs means properties can be missed out when companies build broadband networks, even where they have deployed broadband in the surrounding area. Openreach reported in 2023 that there were over 800,000 flats in the UK where [its fibre network is present in the street outside the building, but they cannot gain access](#) to connect properties inside.

Unresponsive landlords

The [Telecommunications Infrastructure \(Leasehold Property\) Act 2021](#) aims to address the issue of unresponsive landlords of residential MDUs. It currently only applies to residential properties (such as blocks of flats) although the Secretary of State may, by regulations, extend its scope to cover other types of properties.

The act introduces a new process under Part 4A of the ECC for telecoms operators to access multi-dwelling residential buildings through the Lands Tribunal. The new process applies where a tenant has requested a connection from a telecoms operator, but the landowner has repeatedly failed to respond to formal requests from the operator to negotiate access. Courts will be able to grant operators the rights they need to install infrastructure to connect the property of the tenant who made the request. Other residents can also be connected if doing so would not cause an additional burden to the building owner.⁹¹

The [Library briefing paper on the Act](#) provides further information.

Implementing regulations were laid in October 2022 following a consultation on detailed aspects of the new process.⁹² The regulations specify, for example, that operators must send the building's owner four notices before they can apply to the courts for access rights: an initial notice requesting access, two warning notices, and a final notice. If the landowner responds at

⁹¹ [Communications Act 2003](#), Sch 3A, s27G

⁹² DCMS, [Consultation on regulations to implement the Telecommunications Infrastructure \(Leasehold Property\) Act](#), 24 June 2022

any point the operator will no longer be able to apply for rights under Part 4A.⁹³

Leaseholder right to request broadband

While the 2021 act created a procedure for bypassing unresponsive landlords, it cannot be used if the landlord actively refuses to grant access.

Openreach has argued that the procedure is also slow (as it requires court action) and costly (“a whopping 2.5 times our usual budget”).⁹⁴

In December 2025 the government consulted on a proposal to grant residents of leasehold flats in England and Wales a statutory right to request gigabit capable broadband. A leaseholder’s request would not grant broadband operators the right to enter the building. The government frames it as “a nudge measure to ensure that operators can readily negotiate with the appropriate freeholder”.

The freeholder would be required to acknowledge the leaseholder’s request within 28 days, then identify and contact a network operator who could supply broadband to the building. The freeholder would only be able to refuse requests on specified grounds, including if two operators had refused to connect the building at a reasonable cost.

In the King’s Speech 2026 the government confirmed it would take forward this proposal in the Leasehold and Commonhold Reform Bill.

The right would not extend to Scotland, where leasehold no longer exists. Instead, operators would need the consent of all freeholders in the building. Openreach has [called on the Scottish Government to make it easier to deploy broadband to flats in Scotland](#).

The industry broadly welcomed the proposals. As noted above, access to flats has long been highlighted as a barrier to deployment. Earlier policy proposals for resolving the issue involved granting operators an automatic right to upgrade existing equipment in MDUs. However, this was opposed by many altnets (and the previous government) because it would have favoured Openreach, as discussed in the Library’s article, [Broadband in flats: the urban digital divide](#).

⁹³ [Telecommunications Infrastructure \(Leasehold Property\) \(Conditions and Time Limits\) Regulations 2022](#)

⁹⁴ Openreach, [Bridging the digital divide](#), 1 December 2023

4

Street works: installing infrastructure on public roads

Street works are a significant element of telecoms infrastructure builds, especially broadband. Deploying gigabit capable broadband networks involves laying new fibreoptic cables, often underneath public roads. The government estimates that street works account for 70% of the cost of fibre broadband deployment.⁹⁵

Street works are also a challenge for local authorities. The government estimated in 2021 that one third of street works in England were undertaken by telecoms operators.⁹⁶ With multiple operators building networks independently, local authorities need to coordinate works undertaken by telecoms operators and other utilities to minimise disruption to residents.

4.1

Roles and responsibilities

Part 8 of Electronic Communications Code (ECC) provides telecoms companies with rights to install telecommunications infrastructure on or under public roads and to carry out the associated street works. This provides the legal basis for telecoms companies to be considered statutory undertakers (along with utility companies) under Parts III and IV of the [New Roads and Street Works Act 1991](#) in England, Wales and Scotland (the NRSWA), and the Street Works (Northern Ireland) Order 1995 ([SI 1995/3210](#)) in Northern Ireland.⁹⁷

More information on street works generally is provided in the Library briefing, [Street works in England](#).

Consent from the highway authority

The NRSWA and associated regulations allow statutory undertakers to carry out street works on public roads without the prior consent of the local highway authority. This means that telecoms companies do not need to agree a wayleave to install infrastructure on or under a public road.⁹⁸

⁹⁵ DCMS and DfT, Street works toolkit, 23 May 2019

⁹⁶ DfT, [Street and road works: further reforms](#), 28 May 2021, para 4

⁹⁷ A comparison of street works and planning legislation relevant to building telecoms infrastructure in each nation is provided in a report by Analyst Masons, commissioned by the Broadband Infrastructure Group, [Lowering barriers to telecoms infrastructure deployment](#), May 2017

⁹⁸ A wayleave would, however, be required for a private road.

The NRSWA provides some powers to local highway authorities to manage how companies conduct works and requires companies to provide advance notice of the works to the authority. However, most highway authorities have introduced permit schemes for street works, which replace the NRSWA's notification requirements in those areas. Permit schemes effectively require undertakers to book time on the street, and they must obtain a permit from the highway authority before any work is carried out. Each permit covers an individual street.

Telecoms operators must also comply with the [Electronic Communications Code \(Conditions and Restrictions\) Regulations 2003](#), as amended, which include provisions regarding consultation with highways authorities.

Reinstating the street

Undertakers have a responsibility under section 70 of the NRSWA to 'reinstate' the street; that is, to return it to its original condition. The Department for Transport issues statutory guidance on the standard of reinstatement work, the [Specification for the reinstatement of openings in highways](#). Section 71 of the NRSWA requires undertakers to comply with the Department's guidance.

Local highway authorities are responsible for inspecting street works and taking action against non-compliance. If they find that a street has not been reinstated to an adequate standard, highway authorities have powers to require undertakers to carry out remedial work, or to do the work themselves and recover the costs. They can also require consistently underperforming undertakers to prepare an 'improvement plan' setting out actions to improve their performance.⁹⁹

4.2

Cooperation between operators and local authorities

Telecoms companies have raised concerns about inconsistent approaches between local authorities to the management of street works and the interpretation of street works legislation, arguing that this inconsistency has created uncertainties and inefficiencies when seeking to build infrastructure.¹⁰⁰ When then Independent Networks Cooperative Association (INCA) asked members about the biggest challenges they faced in terms of network deployment, delays and costs associated with street works were, alongside planning, top of the list.¹⁰¹

⁹⁹ Department for Transport, [Code of practice for inspections](#), July 2011

¹⁰⁰ DCMS, [Future Telecoms Infrastructure Review](#), 23 July 2018, para 60. See also for example, a report by Analyst Masons, commissioned by the Broadband Infrastructure Group, [Lowering barriers to telecoms infrastructure deployment](#), May 2017

¹⁰¹ INCA, [Metric for the UK independent network sector 2022](#), 14 June 2022, section 7

On the other hand, local highway authorities have argued that telecoms companies take an inconsistent approach to sharing information about their deployment plans, which makes it difficult for them to coordinate works effectively (across multiple utilities, not just telecoms companies).¹⁰²

In its 2018 Future Telecoms Infrastructure Review (FTIR), the government noted that there was a “culture of mistrust” between local authorities and operators.¹⁰³ The FTIR said the government would aim to “ensure a uniform approach” to street works across the country with both local authorities and undertakers “promoting a collaborative and flexible approach”.

The then National Infrastructure Commission recommended that local authorities appoint a ‘digital champion’ with responsibility for engaging with telecoms providers.¹⁰⁴ Similar calls have been made by the Broadband Stakeholder Group and the thinktank Centre for Cities.¹⁰⁵

The DfT has an ongoing programme of work on facilitating street works across all utilities, including broadband. In July 2018, DCMS and DfT published a [Street Works Toolkit](#) (for England and Wales) that provides practical guidance for managing street and road works for the deployment of broadband infrastructure. The toolkit was agreed between the government and Street Works UK (on behalf of operators), the Joint Authorities Group (on behalf of local authorities) and the Highway Authorities and Utilities Committee.

4.3

Flexi permits

In May 2021 the DfT issued a consultation on proposals to reform the street works process.¹⁰⁶ The consultation sought views on introducing a more flexible permit system. ‘Flexi permits’ would allow operators to carry out multiple works over multiple streets for a specified time. In the current system operators need a permit for each street on which works will take place. Operators were in favour of this reform. Openreach has said it applies for 300,000 street works permits a year, which flexi permits could reduce by up to 90%.¹⁰⁷

Highway authorities were generally opposed. They raised concerns about a loss of control and oversight over works and believed that it would make coordination more difficult.

¹⁰² DCMS, [Future Telecoms Infrastructure Review](#), 23 July 2018, para 61

¹⁰³ DCMS, [Future Telecoms Infrastructure Review](#), 23 July 2018, para 61

¹⁰⁴ National Infrastructure Commission, [National Infrastructure Assessment](#), 10 July 2018, p30

¹⁰⁵ Analyst Masons, [Lowering barriers to 5G deployment](#), July 2018; Centre for Cities, [Delivering change: How cities can make the most of digital connections](#), July 2018

¹⁰⁶ DfT, [Street manager and permit scheme changes](#), 13 May 2022

¹⁰⁷ Openreach, [Policy hub: how to back better broadband](#), undated, accessed 22 March 2023

The government decided not to proceed with flexi permits, saying that highway authorities had “raised valid concerns and points of detail that need to be further considered and worked through.”¹⁰⁸ Industry group techUK said the decision not to implement flexi permits was a “major missed opportunity”.¹⁰⁹

The government said in April 2023 that it was “working with local authorities and the telecoms industry to further trial the use of flexible street works permits in a number of counties”.¹¹⁰ A trial involving two highway authorities and three undertakers eventually took place between February and July 2025 and an evaluation report was published in April 2026.¹¹¹

Most participants agreed flexi permits were “workable and beneficial”, particularly for broadband deployments where many individual street works take place across an area. However, because of the study’s small sample size and other caveats the authors were “not able to make a definitive recommendation either in favour of or against proceeding with flexi-permit legislation”.¹¹²

¹⁰⁸ DfT, [Street manager and permit scheme changes](#), 13 May 2022, p9.

¹⁰⁹ TechUK, [The FTIR: fit to delivery for 5G and full fibre four years on2](#), October 2022, p13

¹¹⁰ [Digital Infrastructure Update](#), HCWS720, 18 April 2023

¹¹¹ RSM, [Trial of flexi-permits in England: information pack](#) (PDF), October 2024; DfT, [Evaluation of flexi-permit trials](#), 9 April 2026

¹¹² DfT, [Evaluation of flexi-permit trials](#), 9 April 2026

5

Access to existing infrastructure

Utilising existing infrastructure to host broadband cables or mobile equipment can help reduce the time and cost of network deployment.

5.1

Sharing broadband and mobile infrastructure

Infrastructure sharing is where two or more operators utilise the same infrastructure. For example, broadband operators could each run their own cables through a single underground duct, or multiple mobile operators could place their own antennae on a single mast.

Utilising existing infrastructure to host broadband cables or mobile equipment can help reduce the time and cost of network deployment. There is, therefore, a commercial incentive to do so. However, it is not always technically feasible. For example, an existing mast, pole, or duct may not have sufficient space to host new equipment.

Operators would need reach an agreement with the owner of the infrastructure to access it. This is a private commercial matter and there is, in most cases, no legal obligation on companies to either seek or accept an infrastructure sharing arrangement. The two main exceptions to this are broadband operators Openreach and KCOM (see section 5.2 below), and networks built under the government's Project Gigabit and Shared Rural Network programmes:

- Operators who receive subsidies under Project Gigabit (which supports the rollout of broadband to hard to reach areas) must build additional capacity into their networks.¹¹³ For example, underground ducts must be capable of housing cables from at least three competing infrastructure providers. The operator must also offer network access on “fair and non-discriminatory” terms. This is to prevent the operator from exploiting the monopoly it is likely to hold in the subsidised build area.
- Masts built or upgraded under the Shared Rural Network (which aims to improve rural 4G coverage) must be available for all four mobile operators to use. This is so that they can tackle ‘partial not-spots’, areas with coverage from some but not all MNOs.

¹¹³ Building Digital UK, [Gigabit infrastructure subsidy guidance: wholesale open access network requirements](#), 18 December 2023

5.2

Access to Openreach's and KCOM's duct and poles

Openreach

Since 2010, Openreach has been required to allow competitors to rent access to its ducts and poles for the purpose of deploying fibre cables for high-speed broadband services.¹¹⁴ This is known as physical infrastructure access (PIA). Openreach is required to offer PIA as a product, with transparent pricing and terms.

Openreach is subject to PIA rules because Ofcom has assessed that it has significant market power in the broadband network market. As the former national telecommunications monopoly, Openreach's copper broadband and landline network reaches 99% of UK premises. Ofcom said that Openreach's ability to reuse its physical infrastructure, "much of which predates market liberalisation", for the purpose of deploying new full fibre networks would give it a "significant advantage over its competitors". It was concerned that without access to the existing network of ducts and poles, broadband network deployment would be "unviable" in large parts of the country for operators other than Openreach.¹¹⁵

Ofcom introduced reforms to PIA in March 2018, having found low take up by operators.¹¹⁶ The reforms included introducing a non-discrimination requirement, meaning that Openreach must provide access nationally to other providers as easily and on the same terms as to BT. Ofcom said that the reforms could cut the cost of laying fibre cables by 50% and reduce the time taken from days to hours.¹¹⁷ Further reforms were introduced in May 2019, which opened up access to Openreach's ducts and poles for all telecoms services, including business lines and lines used to support mobile broadband networks.¹¹⁸

According to Openreach, 31% of its poles and 39% of its ducts network are used by other companies.¹¹⁹

Ofcom says that PIA "has been transformational in enabling investment and deployment of fibre networks across the UK, as it reduces the cost and increases the speed of network rollout by competitors." The government similarly sees it as one of the most important reforms for supporting infrastructure build.¹²⁰ The Independent Networks Cooperative Association

¹¹⁴ Ofcom, [Unofficial consolidated version of the SMP conditions](#), 15 July 2021

¹¹⁵ Ofcom, [Consultation: Duct and pole access remedies](#), 20 April 2017, para 4.3

¹¹⁶ Ofcom, [Wholesale Local Access Review, Volume 3](#), 28 March 2018, para 2.11-2.19.

¹¹⁷ Ofcom, [Opening up BT's infrastructure for new fibre broadband](#), 20 April 2017, accessed 17 August 2018

¹¹⁸ Ofcom, [Further Ofcom rules to support fibre investment](#), 24 May 2019

¹¹⁹ Openreach, [The Power of Physical Access](#), 16 May 2025

¹²⁰ [HC Deb 27 January 2026 vol 779 c339WH](#)

(INCA) has called PIA a “cornerstone of Altnets’ ability to deploy networks at scale”.

Some altnets have complained that the way Ofcom [the way Openreach calculates PIA prices \(using Ofcom's methodology\) makes it more expensive to build in rural areas](#). However, Ofcom has confirmed it will maintain its current approach.¹²¹

Whether to make use of Openreach’s PIA offer remains a commercial decision for operators. The government and Ofcom do not have powers to force companies to use Openreach’s infrastructure rather than building their own.

KCOM

KCOM is subject to similar rules requiring it to allow competitors access to its physical infrastructure.¹²² This only applies to infrastructure in the Hull area, where KCOM, rather than BT Openreach, is the historical incumbent.

However, while Ofcom requires Openreach to publish information about its PIA services, KCOM’s commercial terms are confidential. Guy Miller, the CEO of network operator MS3, told industry news site ISPreview that due to differences in scale, the cost of accessing KCOM’s infrastructure is higher than Openreach’s.¹²³

Altnets including MS3 and Connexin have argued that they have faced “obstacles and challenges” in gaining access to KCOM’s infrastructure.¹²⁴ They have instead erected their own telegraph poles, which led to protests by residents.¹²⁵ Residents’ concerns have been raised in Parliament by local MPs, who have called on the government and Ofcom to do more to require infrastructure sharing.¹²⁶

KCOM launched a [standardised PIA product](#) in August 2025. Altnets criticised the product, saying it was less transparent, more complex, and more costly than Openreach’s PIA product.¹²⁷ Ofcom is proposing to impose specific requirements on KCOM about the design of its PIA product and benchmark it against Openreach’s.¹²⁸

¹²¹ Ofcom, [Telecoms Access Review](#), Volume 3: Non-pricing remedies 17 March 2026

¹²² Ofcom, [Hull Area Wholesale Fixed Telecoms Market Review 2021-26 Vol 4: legal instruments](#), 28 October 2021, Schedule 1: SMP Conditions

¹²³ ISPreview, [David Davis MP Pressures KCOM to Help Resolve FTTP Poles Dispute](#), 12 October 2023

¹²⁴ ISPreview, [Connexin Blasts KCOM’s Broadband Infrastructure Sharing Plan for Hull UK](#), 19 March 2024

¹²⁵ ISPreview, [Hedon and Preston Protestors Seek 10 Year Boycott of MS3’s Broadband Poles](#), 14 September 2023

¹²⁶ [HC Deb 15 March 2023 vol 729 c933-942](#); ISPreview, [David Davis MP Pressures KCOM to Help Resolve FTTP Poles Dispute](#), 12 October 2023

¹²⁷ CityFibre, [Ofcom’s Market Review for the Hull Area 2026-31: Critique of the KCOM PIA Offer](#) (PDF), November 2025

¹²⁸ Ofcom, [Hull Area Review 2026-31](#), Volume 3: Remedies, 18 December 2025

5.3

Accessing the infrastructure of other operators and utilities

The [Communications \(Access to Infrastructure\) Regulations 2016](#) (the ATI regulations) implement certain requirements of the EU Broadband Cost Reduction Directive.¹²⁹

The regulations include a requirement for operators of utilities (including gas, electricity and water as well as telecoms) to share physical infrastructure with network operators on ‘fair and reasonable’ terms. Utilities operators can only refuse infrastructure sharing requests on objective and proportionate grounds, such as the technical suitability of their infrastructure to host telecoms equipment or health and safety concerns.

The ATI regulations are intended to facilitate commercial agreements between utilities companies (as opposed to requiring them to share). However, the government has noted that they rarely used.¹³⁰ In June 2020 the government launched a [Call for Evidence](#) as part of a review of the ATI regulations to assess whether further improvements could be made to encourage infrastructure sharing and boost infrastructure investment.¹³¹

The government [Response to the call for evidence](#) on the ATI regulations was published on 24 November 2021. Summarising the views of non-telecoms stakeholders, it states that “many highlighted that they were willing to share infrastructure with telecoms operators [but] they stressed that this should not be done to the detriment of their primary duties.” Telecoms companies expressed “limited” interest in using non-telecoms infrastructure:

There was a general preference for using telecoms infrastructure where possible, since it is purposefully designed to house these technologies and there is already an existing regulatory product.¹³²

In its response to the consultation the Internet Service Providers Association reported complaints from its members that some non-telecoms infrastructure owners set “expensive and onerous” health and safety rules for work around electricity networks, for example.¹³³

Openreach has said that the ATI Regulations are “simply not working”. In contrast to its PIA product, access under the ATI regulations needs to be

¹²⁹ Directive 2014/61/EU on measures to reduce the cost of deploying high-speed electronic communications networks (the Broadband Cost Reduction Directive)

¹³⁰ DCMS, [Future Telecoms Infrastructure Review](#), 23 July 2018, para 69

¹³¹ DCMS, [Review of the Access to Infrastructure Regulations - call for evidence](#), June 2020

¹³² DCMS, [Review of the Access to Infrastructure Regulations call for evidence - government response](#), 24 November 2021, para 26. The ‘existing regulatory product’ is access to Openreach’s ducts and poles.

¹³³ ISPA, [Response to DCMS’s review of the Access to Infrastructure Regulations](#), September 2020

negotiated on a case-by-case basis, which Openreach says is “nigh-on impossible”.¹³⁴

The government concluded in its consultation response that the regulations were “broadly appropriate” and that it was not “necessary or proportionate” to make major changes.

¹³⁴ Openreach, [The Power of Physical Access](#), 16 May 2025

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