

Planning Aid England (PAE) Volunteers' Advice Note

Telecoms Masts



Summary

This is one of an occasional series of advice notes prepared by Planning Aid England (PAE) in response to issues raised by people using our e-Mail Advice Service.

A recent increase across the country in the number of proposals for more telecoms masts, to provide further necessary infrastructure to support the latest developments in “5G” mobile phone and data transmission technology, has resulted in an increase of public enquiries for our help to explain the planning position from people affected by individual proposals, as developers seek consent to upgrade existing masts and for new masts and equipment.

This note aims to help people interested in the spread of telecoms masts in their areas and sets out:

1. a brief history, explaining the background to the development of telecoms infrastructure in the UK;
2. a summary of the planning rules which govern the roll out of telecoms proposals in England;
3. some suggestions for individuals and groups wishing to comment on planning applications for new telecoms masts in their area; and
4. references to further reading from both central and local government websites and from a website set up by the mobile phone operators, which give fuller accounts of relevant planning policy and controls.



1) The spread of telecoms masts in the UK - background:

1. The spread of telecoms masts in the UK has been a significant technological advancement with a complex history spanning several decades. This brief overview aims to highlight key milestones in the development of telecoms infrastructure in the UK, covering the major events and challenges faced along the way.
2. *Early Mobile Communications (1970s-1990s):* The story in the UK begins with the advent of mobile communications. In the 1970s and 1980s, the UK witnessed the emergence of the first-generation (1G) and second-generation (2G) mobile networks, which primarily focused on voice communication. During this time, telecoms masts, commonly known as base stations, were established to support cellular networks. However, the focus was on coverage and voice calls, rather than high-speed data transmission.
3. *3G Technology and Data Revolution (2000s):* The turn of the millennium saw the introduction of 3G technology, enabling data services on mobile devices. This was a significant leap forward, allowing limited internet access, messaging, and basic browsing. Telecoms masts were upgraded to support the increased data demands, but the rollout was relatively slow due to technological challenges and regulatory considerations.
4. *4G Expansion (2010s):* In the early 2010s, the UK experienced a surge in smartphone usage and data consumption, necessitating the widespread deployment of 4G technology. 4G offered faster internet speeds, improved call quality, and better connectivity for mobile users. The expansion of 4G required the installation of additional telecoms masts, especially in densely populated urban areas, to meet the growing data demands.
5. *The Emergence of 5G (2010s):* Around 2018, the UK began exploring the possibilities of 5G, the fifth generation of mobile technology. 5G promised ultra-fast data speeds, reduced latency, and enhanced connectivity, making it a critical enabler for emerging technologies like the Internet of Things (IoT), autonomous vehicles, and augmented reality. The government and telecommunications companies recognized the importance of being at the forefront of 5G development to maintain global competitiveness.
6. *Government Initiatives and Spectrum Allocation:* The UK government actively promoted the rollout of 5G infrastructure. In 2018, the Department for Digital, Culture, Media & Sport (DCMS) launched the 5G Testbeds and Trials programme, providing funding for test projects across various industries. Furthermore, the UK's telecommunication regulator, Ofcom, auctioned the necessary spectrum bands to enable 5G deployment by telecom operators.
7. *Challenges and Controversies:* The expansion of 5G telecoms masts in the UK faced various challenges and controversies. Some concerns arose from health fears regarding the potential impact of radiofrequency radiation. While multiple studies have consistently shown no credible evidence of adverse health effects, public concerns led to protests and calls for more research and transparency.





8. *Infrastructure Deployment and Collaboration:* Telecom operators, such as EE (now part of BT Group), Vodafone, O2, and Three UK, have been actively deploying 5G infrastructure across the country. The expansion of telecoms masts has been a collaborative effort between private companies, local authorities, and regulatory bodies. Co-operation was vital to ensure the efficient and widespread deployment of 5G technology.
9. *5G Benefits and Use Cases:* As 5G infrastructure expanded, its benefits became apparent across various industries. Enhanced mobile broadband offered faster and more reliable internet access to users, enabling seamless streaming, gaming, and video conferencing experiences. The low latency and increased connectivity of 5G are essential for supporting the development of applications such as remote surgery, smart cities, and drone use for surveying.
10. To summarise, the spread of 5G telecoms masts in the UK has been part of a transformative journey that evolved from early mobile communications through to the ultra-fast, interconnected world offered by 5G. Moreover, the development of 6G technology has already begun, signifying that the evolution of telecoms infrastructure will continue. This technological advancement has opened doors to a plethora of opportunities, where connectivity and data-driven innovations will continue to shape the way we live and work.

2) Planning rules for telecoms masts in England:

1. Planning rules for telecoms masts in England are an essential aspect of the country's infrastructure development. These rules aim to strike a balance between meeting the growing demand for high-speed connectivity and ensuring the protection of the environment, public health, and the visual landscape. In this section, we summarise the key planning rules and regulations that govern the installation and deployment of telecoms masts in England.
2. *Shared Infrastructure and Mast Upgrades:* To reduce visual impact and enhance efficiency, planning rules encourage the sharing of telecoms infrastructure. Operators are encouraged to co-locate their equipment on existing masts or structures wherever possible. Furthermore, upgrading existing telecoms masts to support technology is often favoured over new installations, provided the upgrade meets regulatory requirements.
3. *National Planning Policy Framework (NPPF):* The NPPF, introduced in 2012 and revised periodically, sets out the government's planning policies for England (see: section 10 on supporting high quality communications at [National Planning Policy Framework - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/policies/national-planning-policy-framework)). It encourages the deployment of digital infrastructure to support economic growth and development and highlights the need for local planning authorities to provide for electronic communications networks and equipment, ensuring they are properly located and designed. The NPPF states that the number of mobile masts should be "kept to a minimum", but LPAs should not impose a ban on mobile masts in certain





areas or insist on minimum distances between mobile masts and existing development. LPAs would not be allowed to ban masts within a certain distance of schools, for example.

4. *Permitted Development Rights (PDRs)*: Under the Town and Country Planning (General Permitted Development) (England) Order 2015, there are certain "permitted development" rights that allow specific types of development without the need for a full planning application. PDRs for telecoms masts fall under Part 16 of the order – see: <https://www.legislation.gov.uk/ukxi/2015/596/schedule/2/part/16/made>. For instance, certain smaller masts and antenna installations can be installed on buildings or other structures under PDRs, subject to specific limitations and conditions.
5. *Protected Landscapes*: In certain areas, referred to in the Town and Country Planning (General Permitted Development) (England) Order 2015, PDRs are restricted. This is the case in designated protected landscapes (known as "Article 2(3)" and "Article 2(4)" land from Schedule 1, Part 1 of the Order). Article 2(3) land includes:
 - a) Conservation Areas
 - b) Areas of Outstanding Natural Beauty
 - c) the Broads
 - d) National Parks, and
 - e) World Heritage Sites
6. Article 2(4) land includes land within National Parks, the Broads, and land outside the boundaries of a National Park but within specified parishes listed in Schedule 1 Part 2 of the Order.
7. *Prior Approval Process*: For larger telecoms masts and installations not covered by PDRs, a mobile phone operator will submit a notification for 'Prior Approval'. The prior approval process allows authorities to assess the impact of proposed developments on various factors, including siting and appearance. It is worth emphasising that with prior approval applications the development plan – and any telecoms policy in it - is only a "material" (not a decisive) consideration. Visual impact and siting are the only two issues that may be taken into consideration in prior approval applications. Given these are capable of wide interpretation, this is where development plan policies may be of help.
8. Local authorities have 56 days to determine whether prior approval is granted or refused (and full planning permission required).
9. Prior Approval will usually be necessary where a proposed mast fits into one of the following categories:
 - a) The alteration or replacement of a mast which would be no taller than an existing mast.
 - b) The alteration or replacement of a mast up to and including 25m in height above ground level.
 - c) The provision of associated radio equipment housing with a volume of upto 2.5 cubic metres.
 - d) The installation of new masts up to a height of 30 metres when not in a protected area such as a National Park, Area of Outstanding Natural Beauty, or a conservation area.
10. *When Planning Permission is Required*: Planning permission is required for telecoms infrastructure that is not permitted development – e.g. new ground-based masts above 30 metres in height. It is worth noting that in some instances even shorter masts may need



a full planning application - for example, if they require a new site access. An operator can only go ahead once they have obtained planning permission from the local planning authority (LPA). LPAs will take the Government's National Planning Policy Framework (NPPF) into account when deciding planning applications - and when drawing up their local plan. They will determine planning applications in line with their local plan unless any material considerations indicate otherwise.

11. *Protected Buildings and Heritage Assets:* Local authorities evaluate how proposed masts fit into the landscape and whether they may affect the character of an area. With buildings which have significant historical or cultural value, such as listed buildings or scheduled ancient monuments, planning rules require special consideration. The impact on protected areas and heritage assets must be thoroughly assessed before any development can proceed.
12. *Health and Safety:* The planning process for telecoms masts in England must consider potential health and safety implications related to radiofrequency (RF) radiation. The International Commission on Non-Ionizing Radiation Protection (ICNIRP) sets guidelines on RF exposure limits to protect public health – see: <https://www.icnirp.org/en/activities/news/news-article/rf-guidelines-2020-published.html>. Installations must comply with these guidelines, and applicants must provide evidence of compliance during the planning process. To do this they will usually submit an 'alternative sites assessment'. This will show how the least harmful site within a search area has been chosen, with supporting evidence.
13. *Commercial Need and Technical Restrictions:* It is worth emphasising here that applicants' submissions in support of planning applications regarding commercial need and technical restrictions (including a chosen search area) cannot be questioned.
14. *Community Consultation:* Local authorities typically engage in community consultation during the planning process to ensure transparency and community involvement. This involves informing local residents and stakeholders about proposed telecoms masts and allowing them to provide feedback and express any concerns they may have.
15. *Future-Proofing and Innovation:* Planning rules for telecoms masts aim to be flexible and future-proof. As technology evolves, it will be important to accommodate emerging innovations while ensuring that installations continue to meet environmental and health standards.
16. In summary, planning rules for telecoms masts in England revolve around striking a balance between facilitating the expansion of digital infrastructure and safeguarding public interests. The rules consider:
 - a) making efficient use of existing infrastructure
 - b) environmental impact,
 - c) health and safety and
 - d) community consultation
17. To enable the deployment of this continually evolving technology while preserving the visual and environmental character of England's landscapes.



3) Some suggestions for individuals and groups wishing to comment on planning applications for new telecoms masts:

Anecdotal evidence and opinions have been provided by our volunteers on planning proposals for telecoms masts and equipment in their areas. This has been with a view to suggesting some aspects which people interested in commenting on individual proposals in their own areas might want to consider / pursue. It is neither a set of recommendations nor comprehensive:

- a) The quality of information submitted with applications: this might appear hastily prepared and generic rather than specific to the location concerned.
- b) An absence of mapped information: showing current or expected/proposed coverage, superficial assessments of alternatives, or unusual location choices, e.g. perhaps on a designated public right of way in the countryside. What gap in coverage is being met by a new proposal – and are there really no alternative existing masts which can be utilised?
- c) Some masts, especially in more remote rural locations, do not appear to have accompanying power sources: this should be queried – e.g. will they rely on diesel generators?
- d) Many sites, again particularly in rural locations can involve convoluted access arrangements: for example if there is no service road nearby – and might raise concerns regarding their visual intrusion and potential impact on their surroundings with the need for new servicing traffic.
- e) A community might consider it already has good telecoms coverage: even in more remote areas this might be the case with the coming of alternative providers, e.g. Starlink or B4RN.

4) Links to useful public sector guidance:

Links to useful further guidance available at the time of writing from public sector websites include:

1. Planning rules for 5G masts in England – published by the House of Commons Library – see: <https://commonslibrary.parliament.uk/planning-rules-for-5g-masts-in-england/>
2. Code of Practice for Wireless Network Development in England – published by the Department for Digital, Culture, Media and Sport (DCMS) – see: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwjd9zulk-AAxWhVkEAHSueBvMQFnoECCYQAQ&url=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fgovernment%2Fuploads%2Fsystem%2Fuploads%2Fattachment_da

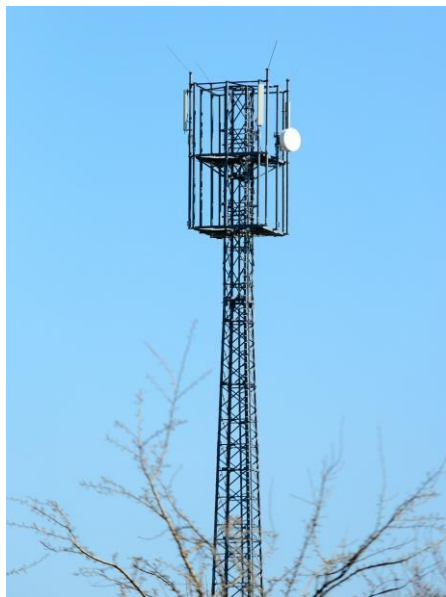


[ta%2Ffile%2F1057999%2FCode_of_practice_for_wireless_network_development_in_England.pdf&usq=AOvVaw3AtDuxWqW382B9VJKxjbfy&opi=89978449](#)

3. Mobile Infrastructure Project : planning applications and masts – published by the Planning Advisory Service – see:
<https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&ved=0CAIQw7AJahcKEwj4moWA7L2AAxUAAAAAHQAAAAAQAg&url=https%3A%2F%2Fwww.local.gov.uk%2Fsites%2Fdefault%2Ffiles%2Fdocuments%2Fmobile-infrastructure-pro-91f.pdf&psig=AOvVaw3UJ8Q6Jp-5MPC9ERYDbmr2&ust=1691060977542791&opi=89978449>
4. Brighton & Hove City Council – see: <https://www.brighton-hove.gov.uk/news/2022/5g-map-launches-new-government-rules-take-effect-0>
5. Adur District Council and Worthing Borough Council – see: <https://www.adur-worthing.gov.uk/planning/mobile-phone-masts/>
6. Cambridge City Council – see: <https://www.cambridge.gov.uk/telecommunications-planning-information>

Additionally, the main mobile phone operators have published their own website guidance, “Mobile UK” at: <https://www.mobileuk.org/5g-and-health>.

There is also a wide range of guidance available on the internet from commercial consultancies.





5) Other notable legislation:

Electronic Communications Code (ECC): The ECC is a legal framework that governs the relationship between telecom operators and landowners for the installation and maintenance of telecoms infrastructure. The Code was significantly updated in 2017 (and set out in Schedule 1 of the Digital Economy Act, 2017) to facilitate the deployment of 5G and other electronic communications networks – see: <https://www.legislation.gov.uk/ukpga/2017/30/schedule/1/enacted>. It provides operators with rights to access land for the installation and maintenance of telecoms masts, subject to reasonable conditions and compensation for landowners.