# Telecommunications and Digital Infrastructure Delivery in Newcastle upon Tyne

Compliance with Development and Allocations Plan Policy DM35:
A Process Note for Developers

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# Foreword by Councillor Joyce McCarthy and Councillor Ged Bell

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## **Foreword**

We are committed to seeing the enormous potential of digital technology being fulfilled to ensure that Newcastle is the most attractive place to innovate and invest across the country; whether this be to start and grow a digital business, trial a new technology or undertake advanced research. Digital technology has the potential to transform Newcastle for the better and to help realise our ambitions to be a digital by design, modern global city.

To help make this vision a reality, we know this requires first class digital infrastructure and supportive guidance to help guide organisations through this journey.

On 24 June the City Council adopted the Development Allocation Plan, which forms Part 2 of our Local Plan and sets out detailed policies that will guide planning decisions, and where development can take place for new homes, jobs and a range of uses right up to 2030. This process note supports the policies outlined in Policy DM35 to guide developers through the deployment of digital infrastructure, whether this be telecommunication equipment or broadband infrastructure across Newcastle. Provision of this digital infrastructure will boost our digital sectors and overcome barriers to growth and innovation, creating high-skilled, high-paid jobs for now and for future generations.

Delivering digital infrastructure will require a coordinated and collaborative effort with all stakeholders. The City Council has worked closely with developers, telecommunication providers and infrastructure installers to understand their needs and potential.

We look forward to working with all residents, businesses and providers to make sure opportunities are available to everyone in Newcastle, to ensure everyone can access and use digital services to help manage their lives, progress in their careers, improve their health and wellbeing and connect to family and friends.

As our city grows and thrives our inclusive digital infrastructure will be an essential tool for all our residents, businesses and communities. We want every household, shop, trader and organisation in Newcastle to be supported by a high-quality digital network and have the technology, skills and confidence to maximise its potential.

Councillor Joyce McCarthy
Deputy Leader – Newcastle City Council

Councillor Ged Bell
Cabinet Member – Employment and Culture

# Introduction

# Digital Infrastructure: Importance and Benefits

Digital technology has been identified by the Government as **key to social and economic growth**, with a target of connecting 15 million premises to full fibre broadband by 2025 with gigabit-ready connectivity for everyone by 2025 and full fibre connectivity across the country by 2033. Accordingly, the roll-out of both mobile and fixed line broadband capable of providing the highest internet speeds is one of Newcastle City Council's central strategic priorities.

In an increasingly digitised society, fast broadband speeds are of critical importance to businesses and communities alike, which is why Newcastle City Council is encouraging all developers to consider the integration of digital infrastructure at an early stage. This need not be an onerous task, and the **benefits for developers** are clear:

- Residential and commercial developments will be far more desirable to end users if they can promise state-of-the-art digital connectivity. Evidence suggests that broadband speeds could play a role in attracting potential buyers and tenants, and even in raising property prices. A survey of 2,000 consumers, conducted in 2017 by housing developer Redrow, found high-speed broadband to be the second most important factor in creating a community. In 2014, researchers from London School of Economics and Imperial College Business School found that UK property prices increase by around 3% on average when internet speed doubles, based on statistics from a 15-year period. Incorporating fast broadband therefore appears to be key to the marketability of modern developments. Hyperoptic conducted a survey of 228 housing professionals and 2,000 UK homeowners of renters, which unsurprisingly reveals that most respondents now consider good broadband connectivity to be the "4 utility" alongside water, gas and electricity.<sup>3</sup>
- Whilst providing broadband infrastructure to a new development, it could also be possible to link the
  most up-to-date technology to nearby properties with minimal extra cost and disturbance. This would
  bring a clear benefit to existing communities and could help to secure community buy-in and
  support for new development.
- The delivery of digital infrastructure to developments can often be delivered with minimal or no
  cost to the developer, as many internet service providers will fund the infrastructure themselves,
  reducing any risk to the viability of development.

Engagement with multiple providers provides a strong basis for competition to drive better coverage and realise productivity benefits, as well as cost benefits to customers. For this reason, the City Council recognises the need for consumer choice in ensuring that all communities and businesses have access to affordable, high-speed internet access as an essential modern-day utility. It therefore encourages developers engage with multiple providers as early as possible to negotiate and to incorporate more than one network into major developments.

# Newcastle's Digital Infrastructure Policy

The Newcastle upon Tyne **Development and Allocations Plan (DAP)** provides detailed policies to support the Council's growth ambitions. Policy DM35 in the DAP supports digital infrastructure growth.:

### Policy DM35 - Telecommunications and Digital Infrastructure

- Development for new or upgraded telecommunications infrastructure will be required to demonstrate that:
  - i. the installation(s) will be kept to a minimum, consistent with the efficient operation of the network:
  - ii. the site is the most sustainable option with all alternatives explored (including opportunities for the sharing or clustering of facilities and siting masts on existing buildings);
  - iii. there will be no significant impact on visual and residential amenity, and the character of any building, structure or wider area; and
  - iv. there will be no significant and irremediable interference with electrical equipment, air traffic services or instrumentation in the national interest.
- 2. Major development will be required to demonstrate how it supplies digital infrastructure to access electronic communications networks within the site boundary.

Part II of this document covers development of telecommunications infrastructure, such as masts, cabinet boxes, and antennae – this section elaborates on the requirements of Part I of Policy DM35.

Part 2 of this document is aimed at residential and commercial property developers and provides

guidance on compliance with the requirement within Part 2 of Policy DM35 to provide digital infrastructure to major developments.

I https://www.redrow.co.uk/newsroom/national/2017/3/high-speed-broadband-second-only-to-a-doctors-surgery-when-it-comes-to-creating-c

 $<sup>^2 \, \</sup>underline{\text{http://www.lse.ac.uk/website-archive/newsAndMedia/newsArchives/2014/07/InternetSpeed.aspx} \\$ 

<sup>&</sup>lt;sup>3</sup> https://www.ispreview.co.uk/index.php/2020/02/no-surprise-hyperoptic-find-broadband-vital-to-home-owners.html

<sup>&</sup>lt;sup>4</sup> https://www.ofcom.org.uk/\_\_data/assets/pdf\_file/0029/154595/pimr-bcmr-llcc-final-statement-introduction.pdf

# **Part I: Telecommunications Equipment**

In line with Newcastle City Council's Smart City ambitions, the expansion of electronic communications networks is supported, including **next generation mobile technology** (such as 5G). Proposals for the installation of telecommunications equipment such as masts, cabinet boxes and satellite dishes, erecting antennae or other such structures will be determined in accordance with the **National Planning Policy Framework** and in particular Chapter 10– 'Supporting high quality communications' (paragraphs 112-116).

The policy aims to keep the numbers of telecommunications installations to a **minimum consistent with** the efficient operation of the network. Existing masts, buildings and other structures should be used to accommodate new equipment, unless the need for a new site has been satisfactorily demonstrated and none of the above alternatives are achievable. **Equipment should be sympathetically designed and** appropriately screened.

The Council would like to engage with operators at the earliest opportunity, through pre-application discussions regarding the future installation and upgrading of new telecommunications infrastructure.

Effective engagement helps to expedite the development process for all. The Council will require applications for telecommunications development (including for prior approval under Part 16 of the General Permitted Development Order) to be supported by evidence to justify the proposed development, including:

- the outcome of consultations with organisations with an interest in the proposed development, in particular with the relevant body where a mast is to be installed near a school or college; and
- evidence to demonstrate that electronic communications infrastructure is not expected to cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest; and
- a statement that self-certifies that the cumulative exposure, when operational, will not exceed
   International Commission on non-ionising radiation protection guidelines; and
   evidence that the applicant has explored the possibility of erecting antennas on any near-by
   existing building, mast or other structure

Applicants should provide evidence that the site is the most sustainable option, with **all alternatives explored**, and that the infrastructure would not result in detriment to local character, visual amenity or heritage assets, in line with current government and industry guidance.

# Part 2: Broadband Infrastructure in Major Developments

# Providing Gigabit-Capable Broadband

The existing copper network that serves as the backbone of current communications infrastructure is increasingly unable to satisfy the demands of the country. Fibre optic cabling can provide much faster internet speeds than traditional copper lines. Currently, the majority of fibre optic internet connections are **Fibre to the Cabinet (FTTC)**: fibre optic lines run from the internet provider to a street cabinet which acts as a distribution point, and then copper wire connects individual premises to this cabinet.

The future of high-speed and high-quality connectivity lies in deeper, more extensive fibre networks known as **Fibre to the Premises (FTTP)** or Fibre to the Home (FTTH), where the fibre optic lines run from the internet service provider directly to each home or business, completely replacing copper wiring and providing even faster speeds. They can deliver download and upload speeds exceeding one gigabit per second, providing very high levels of service quality. Full fibre networks are also **e**asier to maintain, and have lower operational costs than alternative large scale, high speed networks. It also provides a building block for improved mobile communication systems and future smart technologies.

Policy DM35 supports the roll-out of full fibre broadband in Newcastle, and the supporting text in the DAP states "the council will expect development to be supported by the latest digital infrastructure and encourages early discussions with operators".

Gigabit-capable connections can be described as 'the latest digital infrastructure', providing internet speeds of over 1000 megabits per second. Gigabit-capable connections can be delivered most commonly via 'Fibre to the Premises (FTTP)'. Therefore, to comply with Policy DM35 (2) the Council will expect to see FTTP or other gigabit-capable technologies supplied into all new major residential or commercial developments<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup> Major developments are defined as the provision of **10 or more dwelling houses**, or the provision of buildings for commercial uses where the **floor space to be created is 1000 square metres or more**.

Broadband infrastructure providers are eager to roll out FTTP and other gigabit-capable technologies, and are offering to install the technology for free, or at a very low cost, in new developments. Different infrastructure providers have different requirements. Example guides for the three largest providers at present (Openreach, Virgin Media and CityFibre) can be viewed at the links below:

https://www.openreach.com/fibre-broadband/fibre-for-developers
http://www.virginmedia.com/lightning/network-expansion/property-developers
https://www.cityfibre.com/property/

The Council does not endorse any particular telecommunications provider over another. The current offer from Openreach (BT), the UK's largest provider, is provided below for illustration purposes only:

As of I April 2020, Openreach currently install FTTP for free on residential developments with at least 20 plots. On developments with fewer than 30 plots, they will build FTTC for free, or provide FTTP with contributions from developers, ranging from £255 per dwelling for a development of 19 dwellings to £2000 per dwelling for a development of between two and four dwellings. Furthermore, on sites with more than 11 plots, Openreach will rebate the costs of the physical build of on-site duct and chamber infrastructure. For commercial properties, Openreach will install FTTP for free on commercial sites of at least 20 units, offering a bespoke solution for single commercial plots or sites of up to 19 units, contributing an amount per unit towards the cost of the build.

# Meeting the Council's Planning Requirements

Policy DM35 does not require developers to deliver FTTP themselves: rather, the main expectation is that developers will conduct early dialogue with telecommunications providers in order to ensure digital infrastructure is accommodated in each new development. Generally, the provider will install the necessary cabling, but the developer may need to provide on-site duct and chamber infrastructure to support the digital technology, meeting the specification requested by the provider.

To ensure that developers are providing good digital infrastructure, a **Digital Infrastructure Statement** will be required to support major planning applications. This can be relatively brief and could be incorporated into another submission document (such as a Planning Statement or Design and Access Statement), but should meet the following requirements:

- Provide evidence of engagement with broadband providers (some providers require registration at least six months before the first broadband connection is needed);
- State which kind of physical infrastructure is to be provided (FTTP, FTTC or any other solution such as Hybrid Fibre Coaxial); and
- Outline the **provisions which will be made on-site** to enable internet connection upon occupation of each individual residential or commercial unit. This can take into consideration:
  - Servicing access points to the building
  - Wiring
  - Positioning of optical network termination and battery backup
  - Duct laying around the site, under footways and carriageways
  - o Internal network cabling in the building
  - Installation of conduit to the communications room or distribution box
  - Joint boxes
  - Frames and covers
  - Quality control

For Outline Applications, the Digital Infrastructure Statement may be more limited, but should at least commit to supplying details as part of any Reserved Matters submissions, including stating how and when broadband providers will be consulted. The submission of a Digital Infrastructure Statement will be expected in all major planning applications and will be a requirement in the Validation Checklist for major planning applications.

If permission is granted for the development, it is likely that a **planning condition will be imposed** which requires further details of the broadband infrastructure proposed for the site to be submitted prior to occupation of development, ensuring that high-speed broadband is secured as described in the Digital Infrastructure Statement.

### **Further Resources**

### Code of Best Practice on Mobile Network Development in England

Guidelines on telecommunications development in England, developed by mobile network operators in collaboration with the Government and other statutory bodies.

Available here:

https://www.mobileuk.org/codes-of-practice

### **Tyneside Validation Checklist**

Explains detailed requirements for the submission of planning applications in Tyneside local authorities.

Available here:

https://www.newcastle.gov.uk/services/planning-building-and-development/apply-planning-permission/planning-application-forms

### **National Planning Policy Framework**

Section 112: States the need for "high quality digital infrastructure, providing access to services from a range of providers, is expected to be delivered and upgraded over time; and should prioritise full fibre connections to existing and new developments."

Available here:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/810197/NPPF

Feb 2019 revised.pdf

For further information, contact Development Management at:

planning.control@newcastle.gov.uk

0191 278 7878