**Town Planning Statement**

**5G Electronic Communications Base Station**

**At the Existing Cellnex Site / BT Telephone Exchange**

**Sharrow TE**

**Aizlewood Road**

**Sheffield**

**South Yorkshire**

**S8 0YU**

**Site Reference 222778**

**CELLNEX / CTIL**

**28th January 2021**

1. **INTRODUCTION**

1.1 This statement is submitted in support of an application for prior approval for a 5G mobile base station for the mobile network operators Vodafone Ltd and Telefónica UK Ltd, in conjunction with Cornerstone Telecommunications Infrastructure Ltd (CTIL).The application site is operated by Cellnex, a radio site infrastructure provider.

1.2 The application includes:

* A description of the site and surrounding area
* A description of the proposal
* A statement of community engagement
* A review of planning policy considerations
* A review of design and access considerations

1.3 A number of other accompanying documents have been submitted in support of the application and these are referred to and must be read in conjunction with this statement.

**2. SITE AND SURROUNDING AREA**

2.1 The proposal is for the upgrading of an existing rooftop site at the Sharrow Telephone Exchange (TE) on the southern side of Aizlewood Road in the Nether Edge area of Sheffield. The building hosts existing antennas and associated support structures at rooftop level and the purpose of the upgrade is to facilitate the provision of essential new 5G coverage and improved 2G / 3G & 4G service provision. The site is situated within a mixed use residential / commercial area with a high demand for mobile network services. It is considered that the least visually intrusive solution has been put forward via the upgrading of an existing site, within the commercial setting of a BT Exchange rooftop rather than the introduction of an entirely new base station. It is important to note that in addition to being the sequentially preferable solution, the upgrading of an existing rooftop site will fit in within the existing network configuration thereby eliminating the need to introduce additional base stations within the cell search area.

2.2 The proposed upgrade site is housed on the rooftop of a large telephone exchange building that benefits from the screening effects associated with scattered mature tree planting along both sides of Aizlewood Road and from the high rooflines of the surrounding buildings. The upgraded equipment will be of extremely small scale in comparison to the bulk of the host building and will be a significantly less visually intrusive solution than introducing a new ground-based installation within the target coverage area.

2.3 The sharing of base stations between multiple operators is one of the key strategic policy principles contained within Government Guidance. Vodafone Ltd and Telefónica UK Ltd have a network sharing agreement and therefore these installations are fully compliant with the National Planning Policy Framework (NPPF). In keeping with the NPPF guidelines of using “high quality communications” (Section 10), the proposed design has been selected to minimise visual impact upon the street scene by integrating with the existing built environment.

2.5 The presence of the existing roof top equipment sets a clear precedent for telecommunications development in this location and indicates that the principle of this proposal is acceptable in terms of siting. As stated above the National Planning Policy Framework advocates site sharing, and as such we believe that there are no sequentially preferable locations within the defined site search area.

2.6 The design of the proposed equipment is considered to be the least visually intrusive option available given the level of equipment required for 5G. Although it is accepted that there will be a very marginal intensification in the amount of equipment it is felt that such a minor increase would not detract from the character of the area with any visual effects being significantly outweighed by the immense benefits of the new 5G connectivity.

**3. THE 5G PROPOSAL**

3.1 The development proposed is shown in detail in the drawings submitted and is for a new 5G electronic communications base station. The deployment of 5G will utilise the MNOs existing 3G and 4G networks such as the base station already existing at the application site. As such, the application site is likely to carry different mobile connectivity services in parallel, with high data uses operating through the new 5G higher capacity network apparatus subject of this application.

3.2 Unlike earlier generations of mobile connectivity, 5G has more significant technical and operational requirements and this has implications on the amount, height, position and design of the new base station apparatus on the rooftop of the building. To help explain this important detail, we have set this out in the accompanying **“*5G Technical Support’*** document,which must be read in conjunction with this planning statement.

3.3 The principal elements of the proposed development at the application site reflect these various siting and design factors within the technical support document:

* The installation / replacement of a rooftop array of freestanding antennas.
* The installation of radio equipment housing at rooftop level.
* The installation of cabling and associated development.

3.4 The radio equipment housing will need to be mechanically ventilated to avoid overheating of equipment. The ventilation equipment is only likely to operate during the day during hot weather. If it is considered specific noise attenuation measures to be necessary, we would be pleased to discuss practicable solutions.

3.5 Section 6 of the Code of Best Practice on Mobile Network Development in England, published in November 2016, explains how mobile networks operate. In the annual network rollout information supplied, the operators will have explained their network requirements for 5G and the anticipated use of existing sites, including those owned by radio site infrastructure providers like Cellnex.

3.6 The application site has been selected by the operator as this will provide the required level of 5G network coverage while properly meeting national town planning policy objectives for the shared use of existing electronic communication sites, in this case owned / operated by Cellnex.

**4. PRIOR ENGAGEMENT**

4.1 The recently revised National Planning Policy Framework (NPPF) and the Code of Best Practice on Mobile Network Development in England require a consultative approach to network development with the planning authority and local community, reflecting the particular sensitivities of any given site. The proposal received an Amber score when assessed against the industry traffic light rating model.

4.2 The pre-application consultation in relation to the application site was undertaken with your Authority and Ward Councillors (Alison Teal, Jim Steinke and Peter Garbutt). In our engagement letter we sought to agree with you the appropriate traffic light rating and associated engagement requirements with the local community and obtain your comments on the siting and design of the development. At the time of submission there has been no response to this pre-application consultation and accordingly we would be pleased to address any necessary matters within the determination period of the application.

**5. PLANNING POLICY**

1. The relevant planning policy and best practice framework is found principally within:

* National Policy, especially the National Planning Policy Framework (NPPF)
* The local policy framework set out in the adopted Development Plan;
* The Code of Best Practice on Mobile Network Development in England.

1. From these documents can be discerned the general policy background that exists for electronic communications development, site specific policies and the key considerations relevant to the siting and design of appropriate electronic communications development. As planning authority, you will be familiar with this framework and so in the interests of brevity, we do not rehearse it back to you in detail but address instead the principal themes to demonstrate that the application accords with them.

#### National Support for Modern Communications

1. There is significant UK Government support for the delivery of 5G, particularly as this new connectivity will be a step change from earlier generations of mobile connectivity and will be critical to economic growth and sustainable communities. Our accompanying document of national policy ‘**National Policy -** **Delivering Ultra Fast Broadband Mobile Connectivity’,** sets out how 5G mobile connectivity will underpin the UK Digital Economy and the significant social, economic and sustainability benefits of advanced modern connectivity. It is essential that the planning system looks to support and facilitate new 5G base station installations such as that proposed to meet the Government’s Digital Strategy. In addition, modern connectivity, such as 5G, will be essential to help the Government meet its wider sustainability and climate change targets and we explain this in more detail in our accompanying document ‘***5G – Helping tackle climate change’***.

#### Balancing operational and environmental considerations

1. The special operational and technical factors that require specific siting of a 5G base station should be balanced by the need to minimise environmental and visual impact.
2. However, paragraphs 3.2 – 3.3 of the Code of Best Practice explain that there is now far greater emphasis that visual impact should not override significant radio planning requirements to achieve mobile coverage to a particular area, particularly with the need to support the massively growing and intensifying demand for mobile communications across the UK. Indeed, in terms of looking to meet operational needs for 5G, the Code of Best Practice emphasises that the NPPF now applies a reduced policy test compared to previous guidance. This helps clarify than an operator is only required to satisfy the normal test of acceptability having regard to all material planning circumstances, rather than looking for the ‘optimum’ solution as required under the former PPG8.
3. In balancing these requirements, the starting point for the 5G networks is to use existing electronic communications sites owned by other operators or radio site management companies, such as Cellnex. This policy objective is backed with the statutory obligation placed upon operators to share apparatus, where practicable out under General Condition 3(4) of the Electronic Communications Code (Conditions and Restrictions) Regulations 2003, as amended.
4. In this instance, the installation of apparatus at this existing site owned or managed by Cellnex, where there are existing operations aligns with this longstanding policy.
5. As a matter of principle, the development proposed is in accordance with the relevant policy framework and should be therefore be acceptable. In the next section, the Design Considerations are reviewed to demonstrate that the detail of the development is also acceptable and that in accordance with the presumption in favour, planning permission should be granted.

#### Local Policy Considerations

1. At local level, the proposal has been considered against the Sheffield Unitary Development Plan – Adopted March 1998 Policy BE14 - Telecommunications and S8.1 of the Sheffield Core Strategy (March 2009)

Policy BE14 – Telecommunications states:

*Telecommunications development should be sited and designed so as to minimise its visual impact, subject to technical and operational considerations, and will be permitted only if the scheme includes satisfactory proposals to ensure that the site would be restored to its original condition should the development no longer be needed for telecommunications. New equipment should share masts or be sited on existing structures where this is technically and economically possible.*

1. In accordance with the requirements of the Sheffield Unitary Development Plan (1998) and Core Strategy (March 2009) policy requirements, the proposal is for a sensitively designed upgrade of an existing shared site housed on the rooftop of the Sharrow Telephone Exchange. It is considered that the proposed upgrade will not overly intrude into the locality and any associated visual impact will not outweigh the continued need and future demands to provide coverage to the surrounding area. The visual effects of the proposed upgrade will be extremely minor being of small scale in comparison to the overall bulk of the host building. The existing site is situated as far away as technically possible from the views of residential properties on the edge of a settlement area adjacent to works units and a local meeting room facility. Views from the nearest residential properties will be masked by tree planting housed within the verge overlooking the site and these screening effects will be further enhanced by scattered tree planting to the north along Aizlewood Road and to the south on Hale Street.
2. In accordance with Policies SP 1 and DM 1’s requirements for high quality design, the upgrading of the existing installation will be a considerably less visually intrusive coverage solution than introducing a new separate ground based or rooftop installation. The visual effects have been further reduced by specifying the narrowest available profile of antenna support poles and by keeping the height of the antennas down to an absolute minimum. It is also worth stating that the ancillary equipment enclosure upgrades will be out of sight towards the central area of the flat roof.
3. The proposal will also support Challenge 8 of the Sheffield Core Strategy (March 2009) which seeks to enable the efficient use of telecommunications infrastructure. The proposed development is therefore considered to strike the best balance between meeting the specific network requirements for the operators and minimising environmental impact.

**6. DESIGN CONSIDERATIONS**

1. The development proposed is exempt from the requirement to provide a design and access statement under Article 9 of The Town and Country Planning (Development Management Procedure) (England) Order 2015, as amended. However, to assist your consideration of the detail, this section provides a description of the process adopted in the design of the proposals and explains the access considerations. Due regard has been given to the factors listed in Appendix A of the Code of Best Practice.

**Physical Context**

1. The proposed upgrade site has been carefully selected in a position capable of providing the required new essential 5G coverage within the commercial setting of a large BT Exchange whilst minimising visual intrusion within the target coverage area. The height of the equipment has been kept down to the absolute minimum capable of providing the required coverage and the ancillary equipment enclosure upgrades will be out of sight towards the central area of the flat roof. It is also important to note that the upgrade will not require an increase in height of the existing stub tower, merely requiring additional equipment at headframe level as detailed within the enclosed drawings. The upgrading of a shared existing facility has eliminated the need to provide two new and entirely separate additional base stations within the target area.
2. The visual envelope of the existing and upgraded equipment will be extremely small due to the screening effects associated with the scattered mature tree planting along the western side of Aizlewood Road. These masking effects will be further enhanced by the screening effects of the rooflines of the surrounding buildings with numerous works units and commercial buildings within the immediate vicinity of the exchange. Whilst it is acknowledged that there are residential properties within the locality, the proposed upgrade site has been carefully selected on a large telephone exchange building situated as far away as technically possible from the views of residential receptors.

**Amount, Design, Layout and Scale of the Development**

6.4 The scale, layout and design of the development has been guided by the special 5G technical and operational factors affecting the need to provide coverage to the local area, having regard to the need to minimise visual impact. With regard to the main component elements of the development proposed***:***

* **Kept in proportion to the building or structure**

The scale of the apparatus is not large and when installed should look proportionate to the structure as a whole.The antennas are similar to the existing electronic communications apparatus installed on the building although higher and closer to the edge of the rooftop to meet the especial technical and operational requirements of 5G. They will therefore be seen in the context of this apparatus and will not appear as incongruous or jarring additions to the building.

* **Respect architectural style**

Within the severe technical constraints, the apparatus shall be installed in a manner that respects architectural style. The scale of the equipment has been kept down to the absolute minimum capable of providing the required coverage and elements of the existing building have been incorporated in the design to screen views of the equipment wherever possible.

**Have minimal impact above the roofline commensurate with technical constraints**

The apparatus that projects above the roofline has been kept to the minimum having regard to the technical parameters and design considerations explained above. The impact on the apparatus remains contained and new views towards this apparatus from the local vantage points remain limited.

* **Not be detrimental to views and general skyline**

A combination of design, topography and natural and manmade features should help keep any perceived changes to views and the skyline to within acceptable limits. Indeed, within the context of this urban location the attention of the casual observer is likely to remain be focussed more upon the streetscape.

* **Avoid creating clutter**

The apparatus should not look unduly cluttered and insofar as it might be visible it will be viewed as operational electronic communications equipment compatible and now expected on a building designed and constructed exclusively for electronic communications purposes.

* **Use clean lines and maintain symmetry**

The apparatus has clean lines and has been sited to maintain symmetry with both the building and its different elements.

**Antenna Array**

* The numbers of antennas and dishes and their size has been kept to the minimum necessary to provide 5G coverage and to link this site back into the operator’s network. The design of these features is very much driven by operational and technical factors.

**Equipment Cabinets**

* + The number of radio equipment cabinets and their size has been limited to what is required to meet the operator’s current and foreseeable network requirements. The location and design of the equipment cabinets, and the electronic communications equipment housed within them, reflects their functionality and the technical and operational requirement to be in reasonable proximity to the antenna systems and dishes that they support. This avoids exceptionally large runs of feeder cables and associated supporting trays, and the subsequent loss of signals.

**Access Considerations**

6.5 Access to the site will be provided from the existing rooftop access points.

6.6 Once constructed, the development will be unmanned requiring only periodic visits, typically once every two to three months for routine maintenance and servicing.

6.7 In accordance with all relevant health and safety legislation and guidelines, access to the site will be restricted to authorised personnel and the routine maintenance and servicing of the apparatus will only be carried out by properly trained and qualified staff. Electronic communications base stations are specifically designed to prevent unauthorised access by members of the public and, therefore, there is no requirement to incorporate inclusive access arrangements into the proposed layout and design of the development.

**Landscaping**

6.8 The proposed siting of the development has been very carefully chosen to minimise environmental impact. The height of the apparatus on an existing rooftop means that any attempt to screen it in its entirety would be unrealistic in any event.

6.9 The building benefits from the screening effects associated with scattered mature tree planting and therefore the visual envelope of the proposed upgraded equipment will be extremely small. The ancillary equipment has been set back as far as technically possible from the edge of the roof to mitigate its impact in views from public vantage points nearby. For these reasons, additional landscaping is not considered necessary or appropriate to the setting and has not been included within the scheme.

**Appearance**

6.10 The sensitive approach to siting and design should minimise the appearance of the development proposed. In addition, as indicated above the local topography and natural features should help minimise views. Insofar as the apparatus may be visible, they should look straight forward in appearance and reflect its function. To that extent they should in time become accepted features of the local environment as with other forms of communications networks and essentially public utility infrastructure, such as roads and railways.

**7. HEALTH AND SAFETY**

7.1 In support of the application, we include a separate document called ***‘5G Health and Safety’*** which sets out in more detail the associated health and safety considerations. Every installation on a site owned or managed by Cellnex will be compliant with international standards adopted by the UK Government. A certificate confirming compliance with the relevant ICNIRP guidelines on public exposure has been supplied with this application.

7.2 The ICNIRP guidelines seek to protect against the well-known thermal effects of radio emissions and include a significant precautionary factor. These guidelines apply to all forms of electronic communications and mobile technology is one of the lowest powered of these.

7.3 National planning policy remains clear, provided an application is certified as ICNIRP compliant, local planning authorities should not seek to effectively set different guidelines through the refusal of planning permission.

**8.** **SUMMARY AND CONCLUSIONS**

8.1 In summary, the application is in respect of a 5G electronic communications base station necessary to improve a vital network that provides public services.

8.2 The service provided by the operator is in the public interest and is in very high demand, with 5G being the next and highly significant advancement in mobile connectivity. In the UK mobile services now exceed fixed landlines in terms of customer numbers and usage.

8.3 The public interest of the system is clear from the considerable benefits that will flow and it makes a significant and major contribution towards sustainable objectives.

8.4 The operator’s requirement is in the context of network needs associated with a 5G cellular system. These impose particular locational and siting requirements which are even greater with 5G. The technical justification clearly demonstrates the need for this apparatus proposed within the context of the operator’s surrounding network.

8.5 The operator(s) has followed national and local planning policy and best practice guidance in the siting and design of its apparatus in recognition of the need to minimise visual impact. This has included:

* + - Network planning based upon existing sites, including those controlled by Radio Site Management companies like Cellnex.
    - Siting at an existing electronic communications site to minimise new sites and help avoid the unnecessary proliferation of new radio masts and sites for them.
    - Engagement in accordance with the Code of Best Practice procedures.
    - An examination of design options to try and minimise potential visual impact.

8.6 The proposed antennas will comply with all relevant health and safety requirements and will be compliant with the ICNIRP guidelines. There are no exceptional circumstances in this case and therefore no need to consider health effects and related concerns such as the perception of risk further.

8.7 This statement and the other accompanying material has demonstrated that the proposal is in accordance with local Development Plan policy and national policy set out in particular within the NPPF. In particular it is a form of development that is specifically encouraged as a matter of principle and in its detail complies with the policy objective of minimising potential environmental impact.

8.8 In conclusion, the application is for sustainable development, acceptable as a matter of principle and appropriate in its detail and so one which the presumption in favour of granting approval applies.