

Town Planning Statement

5G Electronic Communications Base Station

At the Existing Cellnex Site

**88 Windsor Road
Penarth
The Vale of Glamorgan
CF64 1JL**

Site Reference 235211

CELLNEX AND MBNL

Cellnex

07th October 2021

1. INTRODUCTION

- 1.1 This statement is submitted in support of an application for planning permission for a 5G mobile base station for the mobile network operators (MNOs) EE Ltd and Hutchison 3G UK Ltd, in conjunction with Mobile Broadband Network Limited (MBNL). 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 should 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 88 Windsor Road situated opposite the Penarth Policy Station on the southern side of Windsor Road and to the north of Dingle Road. The building was previously the Robert Smith Garage that has been redeveloped into residential apartments. The building previously hosted telecommunications equipment facing Windsor Street as shown in Figure 1 below and the purpose of the upgrade is to facilitate the provision of essential new 5G coverage and improved 2G / 3G & 4G service provision. It is considered that the least visually intrusive solution has been put forward via the upgrading of an existing site 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.



Figure 1: View of the Robert Smith building before redevelopment from Windsor Road

- 2.2 The upgraded equipment will be of small scale in comparison to the bulk of the host building and has been set back as far as possible from the front of the building facing Windsor Road. It should also be noted that although an increase in width will be required at headframe level for the antennas, the visual effects will be softened by the removal of existing equipment and the associated support structures.

- 2.3 The sharing of base stations between multiple operators is one of the key strategic policy principles contained within Government Guidance. H3G / EE have a network sharing agreement and therefore these installations are fully compliant with the strategies set out in Planning Policy Wales 11.
- 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 PPW 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 very marginally 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 removal of existing rooftop mounted antennas and the associated flagpole shrouding.
 - The removal of a radio equipment housing to be replaced by an upgraded cabinet.
 - 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 The Welsh Code of Best Practice on Mobile Network Development, published in March 2021, explains how mobile networks operate. In the annual network rollout information supplied, the operators will have explained their network requirements 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 communications sites, in this case owned / operated by Cellnex.

4. PRIOR ENGAGEMENT

- 4.1 Planning Policy Wales 10, TAN19 and the Code of Best Practice require a consultative approach to network development with the local 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 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.
- 4.3 The pre-application consultation in relation to the application site was undertaken with your Authority and Ward Councillors (Sivaruby Sivagnanam and Neil C Thomas), Penarth Town Council (The Community Clerk) and Bute Cottage Nursery School (The Manager). 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

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

- National Policy, especially Planning Policy Wales Edition 11 (PPW)
- The Local Development Plan
- Planning Policy Wales Technical Advice Note 19 Telecommunications
- The Welsh Code of Best Practice on Mobile Phone Network Development

5.2 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

5.3 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 help 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

5.4 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.

5.5 The longstanding policy to minimise the potential environmental impact associated with electronic communications development is to avoid the unnecessary proliferation of new radio masts and sites. This policy objective is backed with the statutory obligation placed upon operators to share apparatus, where practicable. This is set out under General Condition 3(4) of the Electronic Communications Code (Conditions and Restrictions) Regulations 2003, as amended. As a consequence, the starting point for planning new 5G networks or the expansion of existing networks is, therefore, to use existing electronic communications sites owned by other operators or radio site management companies, such as Cellnex. In addition, the possibility of using other high structures is also looked at.

5.6 In this instance the installation of apparatus onto the rooftop of this existing site owned or managed by Cellnex, where there are existing operations aligns with longstanding policy. Within this context the apparatus will be seen as an acceptable and justified use, reflecting all of the considerations within paragraphs 5.2.5 – 5.2.13 of Planning Policy Wales Edition 10 and:

- The 5G base station is required as part of a national mobile communications network, necessary to extend and improve mobile connectivity to the local area;
- The target coverage area has been explained and consequently the special operational and technical requirements of 5G necessitate siting of a new apparatus within it;
- All reasonable steps have been taken, through careful siting at an existing Cellnex site, to moderate the visual impact of the development, having regard to technical and operational factors of 5G.

5.7 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

5.8 At local level, the proposal has been considered against the Vale of Glamorgan Adopted Local Development Plan 2011-2026, which was formally adopted by the Council on 28 June 2017. The Local Development Plan does not include a specific

telecommunications policy and therefore the provisions of Technical Advice Note 19 Telecommunications and guidance within the PPW take precedence. Local Development Plan Policy MD1 – Location of New Development and MD2 – Design of New Development are also of relevance.

Policy MD1 - Location of New Development states:

New development on unallocated sites should:

1. Have no unacceptable impact on the countryside;
2. Reinforce the role and function of the key settlement of Barry, the service centre settlements, primary settlements or minor rural settlements as key providers of commercial, community and healthcare facilities;
3. Where appropriate promote new enterprises, tourism, leisure and community facilities in the Vale of Glamorgan;
4. In the case of residential development, support the delivery of affordable housing in areas of identified need;
5. Have access to or promote the use of sustainable modes of transport;
6. Benefit from existing infrastructure provision or where necessary make provision for new infrastructure without any unacceptable effect on the natural or built environment;
7. Where possible promote sustainable construction and make beneficial use of previously developed land and buildings;
8. Provide a positive context for the management of the water environment by avoiding areas of flood risk in accordance with the sequential approach set out in national policy and safeguard water resources; and
9. Have no unacceptable impact on the best and most versatile agricultural land

Policy MD2 - Design of New Development states:

In order to create high quality, healthy, sustainable and locally distinct places development proposals should:

1. Be of a high standard of design that positively contributes to the context and character of the surrounding natural and built environment and protects existing features of townscape or landscape interest;
2. Respond appropriately to the local context and character of neighbouring buildings and uses in terms of use, type, form, scale, mix, and density;

3. Where appropriate, provide new or enhanced areas of public realm particularly in key locations such as town centres, major routes and junctions;
4. Promote the creation of healthy and active environments and reduce the opportunity for crime and anti-social behaviour. In the case of retail centres, developments should provide active street frontages to create attractive and safe urban environments;
5. Provide a safe and accessible environment for all users, giving priority to pedestrians, cyclists and public transport users;
6. Have no unacceptable impact on highway safety nor cause or exacerbate existing traffic congestion to an unacceptable degree;
7. Where appropriate, conserve and enhance the quality of, and access to, existing open spaces and community facilities;
8. Safeguard existing public and residential amenity, particularly with regard to privacy, overlooking, security, noise and disturbance;
9. Provide public open space, private amenity space and car parking in accordance with the council's standards;
10. Incorporate sensitive landscaping, including the retention and enhancement where appropriate of existing landscape features and biodiversity interests;
11. Provide adequate facilities and space for the collection, composting and recycling of waste materials and explore opportunities to incorporate re-used or recyclable materials or products into new buildings or structures; and
12. Mitigate the causes of climate change by minimising carbon and other greenhouse gas emissions associated with their design, construction, use and eventual demolition, and include features that provide effective adaptation to, and resilience against, the current and predicted future effects of climate change

5.9 In accordance with the siting and design requirements outlined in TAN 19 and the LDP Managing Development Policies, the proposal is for a sensitively designed upgrade of an existing shared site housed on the rooftop of 88 Windsor Road in Penarth. 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 relatively minor being of small scale in comparison to the overall bulk of the host building.

- 5.10 The equipment has been positioned as far back as possible from the edge of the roof to lessen the visual effects at ground level and is a less intrusive scheme than the previously installed equipment facing Windsor Road. In accordance with the requirements of TAN 19 relating to siting and 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 base station. The visual effects have been further reduced by specifying the narrowest available profile of antenna support structures and by keeping the height of the equipment down to the absolute minimum capable of providing the required coverage within the target area. It is also worth stating that the ancillary equipment enclosure upgrades will be out of sight to the side of the building.
- 5.11 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

6.1 The local development proposed is exempt from the requirement to provide a design and access statement under Article 7 of the Town and Country Planning (Development Management Procedure) (Wales) Order 2012, 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.

Physical Context

6.2 The proposed upgrade site has been carefully selected in a position capable of providing the required new essential 5G coverage whilst minimising visual intrusion within the target coverage area. The scale of the upgraded equipment will be relatively minor in comparison to the overall bulk of the host building. It should also be noted that although the proposed upgraded equipment will be taller than the existing, the visual effects will be softened by the removal of existing antennas and the associated support structures. 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 within the existing cabins. 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.

Design Principles and Concepts

6.3 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, already referred to above explained in detail in the '**5G Technical Support**' document.

6.4 For example, the numbers of antennas and their size is the minimum amount of development required to provide the required level of coverage for the 5G mobile network. The proposed siting of the apparatus also takes account of technical and other considerations, including the following:

- The 5G antennas have to be installed at specific locations and heights to meet the coverage requirements

- The antennas are similar to the existing electronic communications apparatus installed on the building although wider than the existing flagpole structure at antenna level to meet the especial technical and operational requirements of 5G and meet ICNIRP compliance.
- The antennas have to be positioned to avoid radio interference with any existing equipment already installed on the building.
- All apparatus has to be maintainable in accordance with general health and safety requirements including the CDM regulations.
- All apparatus has to be installed in a structurally feasible manner.
- All apparatus has to be clear of existing features on the roof such as access points, air conditioning units, roof lights, or other electronic communications apparatus.
- All apparatus has to be installed in accordance with the requirements of the building occupier.

6.5 The design options have been examined within those technical parameters, having regard also to the overriding aims set out in paragraph 67 of TAN19 with the principle of minimising contrast between equipment and its surroundings. There are a number of suggested ways in which apparatus might be installed on a building. The following design approaches have also been considered but rejected for the reasons given:

- Flagpoles

Flagpole designs incorporate an omni directional antenna, i.e. one that transmits and receives over 360 degrees. Such an antenna system has poor operational characteristics, with reduced data handling capacity and reduce geographical coverage. In this case, the previously installed flagpole shrouded antenna system would not satisfy the operational requirements of 5G and if utilised could result in the need for a further base station.

- Mock Chimneys

The use of mock chimneys has been explored, but has been discounted for design reasons. In particular, the antennas have to be located at particular locations on the building and a series of mock chimneys at these points would

look odd, as they would look incongruous on the building and would not replicate sympathetically the normal design of buildings with chimneys.

- **Face Mounting**

The building is not sufficiently high and clear of obstacles to enable the face mounting of antennas, which need to have a clear view over the wider area to provide the necessary coverage.

- **Central Mounting**

The possibility of mounting the antennas centrally in a single group has been explored. This would necessitate the use of a stub mast or a support frame. Such structures would have to have an overall height of around five metres to ensure ICNIRP compliance across the roof, as explained above. On a building of this scale, such a structure would not be an appropriate solution.

- **Screening Solutions**

The possibility of screening the apparatus, by way of a false storey or roof made of radio transparent glass reinforced plastic (GRP) has been examined. However, because the building is already dominant in its surroundings, such an option would not be a sympathetic solution in this case.

6.6 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 to reflect the technical requirements of 5G as explained in the '**5G Technical Support**' document. 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. Architecture and its style are about

function as well as pure design. 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 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

- 6.7 Access to the site will be provided from the existing rooftop access points.
- 6.8 Once constructed, the development will be unmanned requiring only periodic visits, typically once every two to three months for routine maintenance and servicing.
- 6.9 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

- 6.10 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.
- 6.11 The ancillary equipment has been positioned out of sight to the side of the building 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

6.12 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.

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 there are now more almost 92.5 million subscriptions to mobile networks and 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 operators have 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 and guidance in PPW 11 and TAN19
 - 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 particularly PPW 11. 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 planning permission applies.