Our ref: 137728\_O2



Head of Planning London Borough of Camden Council Regeneration and Planning 6th Floor Camden Town Hall Extension Argyle Street London WC1H 8EQ

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07.08.13

Dear Sir or Madam

### PROPOSED UPGRADE OF EXISTING TELEFÓNICA UK LIMITED BASE STATION AT FOOTPATH OUTSIDE 358 KILBURN HIGH STREET, KILBURN LONDON, NW6 2QH.

This is a full planning application, and notice in accordance with the electronic communications code under the Telecommunications Act 1984 Schedule 2 as amended by the Communications Act 2003, for permission for the development of:

Telecommunications installation consisting of removing existing 16m high Streetworks pole with 3no. antennas within a GRP shroud and replacing it with a 17.5m high Elara pole with 3no. new antennas within a GRP shroud (relocated approximately 2m). Installing 1no. Lancaster equipment cabinet and ancillary development

at

#### Footpath outside 358 Kilburn High Street, Kilburn, London, NW6 2QH. NGR E524689 N184605

Telefónica UK Limited, commonly known as O2, has entered into an agreement with Vodafone Limited pursuant to which the two companies plan to jointly operate and manage a single network grid across the UK. These arrangements will be overseen by Cornerstone Telecommunications Infrastructure Ltd (CTIL) which is a joint venture company owned by Telefónica UK Limited and Vodafone Limited.

This agreement allows both organisations to pool their basic network infrastructure, while running two, independent, nationwide networks. It also enables both organisations to maximise opportunities to consolidate the number of base stations and significantly reduce the environmental impact of network development.

This application is submitted for and on behalf of Cornerstone Telecommunications Infrastructure Limited (CTIL) and Telefónica UK Limited

The full planning application comprises:

- The original and 3 copies of the 1APP full planning application forms and applicable certificates;
- The original and 3 copies of the Drawings Ref. No's: 100, 201, 202, 301 and 302 with application site red edged;
- A copy of the 'Ownership Certificate' and covering letter as served on the site owner;
- A planning application fee in the sum of £385.00 made payable to Camden Council;
- Design & Access Statement;
- Site Specific Supplementary Information;
- General Background Information for Telecommunications Development;
- Health and Mobile Phone Base Stations document;
- ICNIRP declaration and clarification statement.



This application has been prepared in accordance with the Code of Best Practice on Mobile Phone Network Development.

The enclosed application is identified as the most suitable site option and design that balances operational need with local planning policies and national planning policy guidance.

Furthermore we would like to assist the council and would like to arrange a presentation or meeting with your officers and members to discuss the issues if appropriate.

We are committed to maintaining a positive relationship with all Local Planning Authorities and we would be happy to provide any additional information in relation to this application.

We look forward to receiving your acknowledgement and decision in due course.

Yours faithfully,

Jacquely For

Jacquelyn Fee BSc MSc Mono Consultants Limited

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For and on behalf of Cornerstone Telecommunications Infrastructure Limited (CTIL) and Telefónica UK Limited as a duly authorised agent

#### SITE SPECIFIC SUPPLEMENTARY INFORMATION

#### 1. Site Details

Site Name:	Kilburn High Street	Site Address:	Footpath outside 358 Kilburn High Street,
NGR:	E524689 N184605		Kilburn, London, NW6 2QH.
Site Ref:	137728_02	Site Type: <sup>1</sup>	Macro

#### 2. Pre Application Check List

#### **Site Selection**

Was an LPA mast register used to check for suitable sites by the operator or the LPA?	Yes	<u>No</u>
If no explain why:		
The LPA does not have an up-to-date mast register and rely on their own on-line planning	ng records wh	nich detail all
applications. Nevertheless this information has been reviewed where found.		
Was the industry site database checked for suitable sites by the operator:	Yes	No
If no explain why:		
n/a		

#### Annual roll out consultation with LPA

Date of last annual rollout information/submission:	October 2012
Name of Contact:	Gavin Polkinghorn
Summary of outcome/Main issues raised:	General rollout within the authority

#### Pre-application consultation with LPA

Date of written offer of pre-application consultation:		04.01.13	
Was there pre-application contact:	Y	es	No
Date of pre-application contact:		17.0	01.13
Name of contact:		Sally S	hepherd

Summary of outcome/Main issues raised:

A pre-application consultation email was sent to the LPA on 04.01.13 introducing a number of existing sites, which are earmarked to be upgraded as part of the new CTIL initiative. This email included the option subject to this application, in which it was said that minimal changes were proposed. An acknowledgement was received from the LPA, in which it was indicated that a pre-application fee would be required for advice regarding the scheme.

Nonetheless the proposal relates to the upgrade of an existing base station which has previously been approved by the LPA. In this regard it is clear that the principle of telecommunication development has been accepted onsite in which when balanced against the minimal changes proposed, it was considered appropriate to progress this application and seek the LPA's formal determination.

#### **Ten Commitments Consultation**

Rating of Site under Traffic Light Model:	Green	Amber	Red
Outline Consultation carried out:			
A pre-application consultation email was sent to the ward councillors on 04.01.13 introducing a number of existing			
sites, which are earmarked to be upgraded as part of the new CTIL initiative. This email included the option			
subject to this application, in which it was said that minimal changes were proposed.			
Summary of outcome/Main issues raised:			
One Councillor responded to the consultation requesting clarification on a few matters.			

#### School/College

Location of site in relation to school/college: -

Given the proposal relates to an upgrade of an existing streetworks style base station already present in the street scene no consultation was undertaken with any nearby schools or colleges.

Outline of consultation carried out with school/college: - n/a

Summary of outcome/Main issues raised: - n/a

## Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator consultation (only required for an application for prior approval)

Will the structure be within 3km of an aerodrome or airfield?	Yes	No
Has the Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator		No
been notified?		
Details of response:		
n/a		

#### **Owner's Notice**

Copy of Owner's Notice enclosed?	Yes	No
Date served:		07.08.13

#### 3. Proposed Development

#### The proposed site:

This application relates to an existing telecommunications installation which is found on-site. For reference please see below a photograph of the base station in-situ: -



The existing telecommunications site, to which this application relates, is located on Kilburn High Street, north west of the junction with Loveridge Road. The footpath is approximately 5.5m wide. There are 8m high lampposts located on the footpath. There is also a railway bridge located adjacent to the site. Land use in the surrounding area is commercial/residential in nature.

#### Type of Structure

Elara

Description:

The installation of a 17.5 metre dual user monopole housing three antennas mounted together at the top of the structure. At the base of the monopole there is a 2000mm boxed section measuring 350mm by 320mm, which contains the Remote Radio Heads (RRU). The main stem of the column is cylindrical and will measure 324mm in diameter in which towards the top it will taper to a 540mm diameter antenna shroud. The length of the cylindrical antenna shroud section will be 2500mm.

It is of note that the proposed scheme involves the replacement of the existing structure for that described above, the installation of 1no. equipment cabinet. The dimensions of the proposed equipment cabinet is detailed below.

Overall Height:		17.5 metres
Equipment Housing: Lancaster equipment cabinet		
Length:		1898 mm
Width:		798 mm
Height:		1645 mm
Tower/mast etc – type of material and external colour:	Galvanised steel	
Equipment housing – type of material and external colour:	Galvanised steel - painted greer	(RAL 6009)

#### Reasons for choice of design:

Telefónica UK Limited, commonly known as O2 and Vodafone Limited have entered into a new agreement in which the two companies plan to jointly operate and manage a single network grid across the UK. This initiative strengthens the network infrastructure partnership between the two companies, previously rolled out as part of 'Cornerstone'. This next phase will involve upgrading existing base stations and will be facilitated by Cornerstone Telecommunications Infrastructure Limited (CTIL), a newly formed joint venture company owned equally by the aforementioned operators. The single grid infrastructure overhauled planned by CTIL will enable both organisations to pool and consolidate their respective networks while running two, independent, nationwide networks. Each operator will keep ownership and control of its network spectrum, however as part of CTIL it will mean each operator will have responsibility to manage, maintain and provide coverage in one half of the UK. In general Telefónica will manage and maintain the network in the East, including Scotland and Northern Ireland whilst Vodafone will be responsible for those sites in the West including Wales. In due course once existing installations have been upgraded with technically preferred and robust designs, it will result in a number of other existing base station sites being decommissioned across the authority.

In this instance Telefónica, are acting as the responsible operator for this part of the UK. The choice of design in this latest case has been influenced by the existing base station's siting and appearance as well as 4G coverage requirements. As part of a sequential approach to site selection an existing base station development made available as part of the CTIL initiative was identified. However it is of note that the existing base station requires upgrading and redevelopment. It is of note that the existing streetworks style monopole is technically obsolete due to its design limitations and its inability to accommodate the required apparatus, in this next of phase infrastructure consolidation hence it needs replacing.

Technological advances and the Cornerstone agreement has enabled a mast share structure that breaks the barriers of conventional mast share schemes which in the past have typically involved tall heights due to the separation needed between sets of stacked antennas and or large exposed antenna head-frames. Aware that some standard mast designs with separate operator exposed antennas can appear incongruous within a particular street scene, it is highlighted that the antennas would be concealed within a cylindrical shroud which would be integral to the upper most section of the monopole. The height of the existing structure is 16 metres tall, whilst the new monopole will be 17.5 metres to top. In this regard the height will increase by 1.5m. The proposed height is necessary to retain the continued need for both coverage and capacity of the existing networks. The proposed height and structure type will also cater for future 4G coverage demands which will enable network restructuring towards a single grid network that can serve both operators. Allowing for the proposed height and once this phase of upgrade rollout is complete it will allow existing base stations elsewhere in each respective network to be reviewed and decommissioned where technically feasible. In this regard the height and robust extent of development proposed will aid network consolidation and limit future infill requirements. The overall height of the proposed column at 17.5 metres to top has been kept to its technical minimum given the structure types which are available to the aforementioned operators. The proposed monopole is at a height of 17.5 metres so as not to compromise on the centre line of the existing antennas and to allow for adequate coverage to the target area. Furthermore the dimensions of the structure are the thinnest available so as to be able to support the technically preferred antennas and feeder cables. Taking advantage of the Cornerstone initiative, it is of note that the antennas which function for both operators are closely spaced together so as to keep the profile of the column as thin as possible. In this respect each operators antennas are not distinguishable as separate elements, whereby taking into account the form and appearance of proposed column as a whole, to the naked eye the mast share monopole gives the illusion of a single operator installation. Furthermore it is considered that in opting to connect the site into the national network via an underground link rather than rely on a transmission dish, this has simplified the design and hence reduced the proposal's prominence in the street scene. It is of note that the proposed column in its entirety will have a galvanised finish in which it is considered that this treatment will help assimilate the column into the street scene. The choice of a slim-line streetworks monopole with shrouded antennas is considered to be appropriate as it would minimise the visual impact of the development within the street scene. In light of the above and in choosing this particular monopole design, it is considered that the scheme takes a form which is sympathetic within the context of its immediate street scene.

It is of note that the proposed equipment cabinet is small for a telecommunications development (less than 2.5m<sup>3</sup>) and will be located alongside the new monopole. The proposed equipment cabinet has an appearance similar to existing cabinets found in a street scene. The proposed ground based development will be painted green hence helping it to blend into its environment and reducing its prominence within its immediate environment. In this respect it is considered that the design of the ancillary development will not have a detrimental impact upon the visual amenity of the area.

#### 4. Technical Information

ICNIRP Declaration attached	Yes	No
ICNIRP public compliance is determined by mathematical calculation and implemented by careful location of antennas, access restrictions and/or barriers and signage as necessary. Members of the public cannot unknowingly enter areas close to the antennas where exposure may exceed the relevant guidelines.		
When determining compliance the emissions from all mobile phone network operators on the site are taken into account.		

Frequency:	800, 900 & 2100 MHz
Frequency: Modulation characteristics <sup>2</sup>	LTE, GSM & UMTS
	,
Power output (expressed in EIRP in dBW per carrier)	Maximum 32 dBW
In order to minimise interference within its own network and with other radio networks,	
Telefonica operates its network in such a way the radio frequency power outputs are	
kept to the lowest levels commensurate with effective service provision.	
As part of Telefónica's network, the radio base station that is the subject of this	
application will be configured to operate in this way.	
All operators of radio transmitters are under a legal obligation to operate those	
transmitters in accordance with the conditions of their licence. Operation of the	
transmitter in accordance with the conditions of the licence fulfils the legal obligations in	
respect of interference to other radio systems, other electrical equipment,	
instrumentation or air traffic systems. The conditions of the licence are mandated by	
Ofcom, an agency of national government, who are responsible for the regulation of the	
civilian radio spectrum. The remit of Ofcom also includes investigation and remedy of	
any reported significant interference.	
The telecommunications infrastructure the subject of this application accords with all	
relevant legislation and as such will not cause significant and irremediable interference	
with other electrical equipment, air traffic services or instrumentation operated in the	
national interest.	
Height of antenna to top (metres above ground level)	17.4 metres
	11111100000

#### 5. Technical Justification

Reason(s) why site required e.g. coverage, upgrade, capacity

A retained base station site is required in this location in order to maintain existing network coverage and capacity, as well as catering for future networks demands for both Telefónica, commonly known as O2 and Vodafone to this area of Kilburn.

Telefónica and Vodafone are both Electronic Communications Code Systems Operators licensed under the terms the Communications Act 2003 to provide mobile personal communications networks in the UK. In order to improve the level of service it provides for their customers in line with its licence requirements, both companies are constantly developing their networks, as well as refining and modernising their equipment. Given the dynamic nature of technological advances in telecommunications products, coupled with the demands on operators from subscribers to provide new and better quality services, this dictates a continual reinvestment programme in the infrastructure behind the use of mobile devices. Operators are currently involved in developing sites to provide coverage to areas which have not benefited from access to the full services they offer and to areas of their existing network where increased capacity or improved service quality is required.

Many more people now use mobile devices for personal and business purposes and to a large proportion of the UK population; the use of a mobile phone is now considered an essential part of people's everyday lives both at work and in their leisure time. These customers legitimately demand and expect to have adequate signal coverage and capacity for their mobile devices throughout the country. Mobile phones are now intrinsic to our personal and professional lives and with that people expect they will be able to use their devices when and wherever they need them. However it remains the case in some areas and at particular times of the day, capacity on mobile networks may not keep up with demand, creating network congestion, poor download speeds and service disconnections. Combating these technical deficiencies are at the forefront of the origins of a new search

<sup>&</sup>lt;sup>2</sup> The modulation method employed in GSM is GMSK (Gaussian Minimum Shift Keying) which is a form of Phase modulation The modulation method employed in UMTS is QPSK (Quad Phase Shift Keying) which is another form of Phase Modulation

#### cell instruction and the need to upgrade exiting base station sites in an operator's network.

The ownership and use of mobile devices has changed dramatically since its mass market conception in which the introduction of pre-pay mobile tariffs in the late 1990s led to rapid growth in mobile phone take-up. This resulted in fierce competition between operator providers which lead to falling prices, meaning mobile phones and usage are a lot more affordable to the general consumer market. As the cost of a handsets and bundle packages has fallen this has coincided with the decline in the use of fixed line calls, whereby according to the independent regulator and competition authority, Ofcom, in 2006 household mobile take-up passed that of fixed lines for the first time. Indeed the Mobile Operators Association have said that *"the volume of calls from mobile phones in 2011, comprising 52% of total voice calls"* 

Mobiles are now ubiquitous to most peoples lives in which according to the MOA there are now 81.6 million subscriptions in the UK. With regards the basic functionality of mobile phones the MOA suggest that mobile consumers in the UK sent over 150 billion texts in 2011 with the average person believed to send 50 texts a week. Although the main functionality of mobile phones to support voice calls and messaging remains at its core, in recent years the emergence of smart phones and high-spec wireless devices has put added pressures on operators networks as customers demand reliable data streaming and coverage capacity. In this regard the increased ownership of smart phones is driving significant increases in the number of people accessing the internet on mobile phone networks, creating the emergence and growth of the 'pocket internet'. Indeed the MOA highlight that the average time spent using mobile data services was 2.1 hours a month in 2011, while the volume of data consumed more than doubled in the 18 months to January 2012. According as data volumes over mobile networks has increased this demand has put significant strain on operators existing networks infrastructure and thus the need for more base stations. Ofcom have reported that over a quarter of the population in the UK said they have a smart phone, more than double the number two years ago, in which 23% of adults are reported to access internet content and or send emails from their mobile phones. In this respect many consumers have commented that typical mobile speeds and usage caps are insufficient for the use of data-hungry mobile devices seeking to download music, video content and applications. Indeed internet-based communications services such as social networking sites and instant messaging has put added pressure on mobile phone networks as the growth in the average time spent online can be attributed to the use of the internet becoming more mainstream and accessible via mobile devices.

Indeed the MOA reports that "Mobile telecommunications are vital for the UK's economic competitiveness and in promoting social inclusion. There are now over 81.6 million mobile subscriptions in the UK. Over 5.1 million people now access mobile broadband services via a laptop and dongle, and 39 per cent of UK adults use their mobile phone for internet access." Ofcom have noted that many households now have a variety of means of telecommunications available at their finger tips from their use of satellite systems, fixed line telephones, broadband and mobile phones. However there has been a growth in the proportion of mobile-only homes as network providers increase the amount of minutes that are bundled within mobile contract line rental and market dongle support, meaning that it is not always necessary to have a landline in order to be able to access the internet. Furthermore it was said by the MOA that at the end of 2011 the Mobile Operators Association report that 15% of adults live in a home that has a mobile phone but no landline. In-building coverage and capacity is a key objective of the operators infrastructure rollout and upgrade, however given the very nature of mobile devices which can be taken and used wherever they are needed, this has resulted in the need for high threshold levels of 3G coverage to provide this indoor service to its customers. Also in light of the use of smart phones, SIM card enabled tablets as well as mobile supported satellite navigation systems, this means that in car and outdoor signal strengths need to provide adequate and reliable coverage for the use of hand portable devices. According to YouGov, satisfaction among mobile users with 'staying connected' has seen the steepest declines of all networkrelated attributes, with 20% of mobile broadband rating their experience as poor in July 2009, compared to 9% in June 2008.

In light of the above it is emphasised that the only reason an operator seeks to place a base station anywhere is to improve the service to its customers. NPPF confirms that local planning authorities should not question the need for a proposed telecommunications development. Indeed it would not be financially viable for operators to develop their existing networks further and invest time and monies into any particular case, if there was no demand for the mobile phone service it seeks to provide. Irrespective of the above to many the correlation between their own personal mobile phone usage as opposed to the wider customer needs and demands in a particular area are unrelated matters. Given peoples expectations that their mobile devices will function 24-7, when and wherever they need them, it should not be taken for granted that there is a robust telecommunication infrastructure behind their use. New base stations are required as each cell can only support a finite number of users at any one time. If there is a high customer demand in a cell then greater capacity is required. Therefore a base stations contribution within the operator's network should be seen as an important economic driver and material planning consideration.

Further detail regarding the general operation of the Telefónica and Vodafone networks can be found in the accompanying document entitled 'General Background Information for Telecommunications Development'. This

information is provided to assist the local planning authority in understanding any technical constraints on the location of the proposed development.

#### 6. Site Selection Process – alternative sites considered and not chosen

In accordance with the operators licence obligations, NPPF and the Code of Best Practice on Mobile Phone Network Development, Cornerstone has reviewed existing telecommunications provision operated by Telefónica and Vodafone in the intended target area. An existing base station has been identified in which taking advantage of their Cornerstone agreement a sequential approach to site selection has been taken. Nonetheless it should be appreciated deriving from the origins of the now existing base station, alterative sites would have been considered.

#### **Planning Policies**

#### **Local Planning Policy**

It is recognised that Section 38 (6) of the Planning and Compulsory Purchase Act 2004 states that *"If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise"*. The development plan framework is provided by Camden Local Development Framework. The framework contains no policy relating to telecommunications.

In accordance with National Policy the proposal involves upgrading an existing and established telecommunications site. As stated above and as is further explained within the attached "general background" document, the rapid increase in the use of mobile communications and our society's ever increasing dependence upon it has resulted in a direct need for network improvements through the upgrading of existing sites and the deployment of additional base stations in order to address these needs.

The site in question has already been considered to be acceptable for the accommodation of a base station and, although slight aesthetical amendments are proposed including the addition of new apparatus, the colouring and general principle of the established development will remain. Given the accepted nature of the established apparatus along with the fact that the subject site does not sit within a restrictive planning policy area, it is not considered that this proposal will have anything other than an insignificant impact upon the character of the site and local amenity.

A sequential approach to site selection has been taken. In this instance the operators' have identified an existing street furniture site that currently accommodates Telefonica and that can be upgraded with only minimal works so as to address this requirement.

This proposal makes use of an established mast site and will allow for two operators to address their current coverage requirements via a single base station.

The proposal is to replace the existing mast and install one equipment cabinets. The new pole will also have a galvanised finish as per the existing installation. These minor alterations are not considered to have a negative impact on the general aesthetic of the established site. Nor is it considered that they would be of such detriment to local amenity or the skyline so as to merit a refusal.

The operators are committed to ensuring that the amount and dimensions of all newly proposed apparatus be limited to a minimum operational requirement so as to minimise potential impact. Whilst a slight increase in shroud girth has been proposed the reason for this has been explained in detail above. Furthermore the additional cabinet is required to service the updated antenna types. Without the pole swap and additional cabinet elements, the site will not be able to address the current technical requirement.

#### **National Planning Policy**

#### National Planning Policy Framework (2012)

#### 5 - Supporting high quality communications infrastructure

The National Planning Policy Framework (NPPF) set out Central Government's planning policies for England and how these are expected to be applied. It replaces a number of planning documents including Planning Policy Guidance 8 – Telecommunication. NPPF sets out the Central Government's requirements for the planning system only to the extent that it is relevant, proportionate and necessary to do so. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans,

which reflect the needs and priorities of their communities.

Pertinent to telecommunications development section 5 of NPPF sets out the Governments general overview regarding supporting high quality communications infrastructure and is stated as follows: -

"42. Advanced, high quality communications infrastructure is essential for sustainable economic growth. The development of high speed broadband technology and other communications networks also plays a vital role in enhancing the provision of local community facilities and services.

43. In preparing Local Plans, local planning authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband. They should aim to keep the numbers of radio and telecommunications masts and the sites for such installations to a minimum consistent with the efficient operation of the network. Existing masts, buildings and other structures should be used, unless the need for a new site has been justified. Where new sites are required, equipment should be sympathetically designed and camouflaged where appropriate.

44. Local planning authorities should not impose a ban on new telecommunications development in certain areas, impose blanket Article 4 directions over a wide area or a wide range of telecommunications development or insist on minimum distances between new telecommunications development and existing development. They should ensure that:

- they have evidence to demonstrate that telecommunications infrastructure will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest; and
- they have considered the possibility of the construction of new buildings or other structures interfering with broadcast and telecommunications services.

45. Applications for telecommunications development (including for prior approval under Part 24 of the General Permitted Development Order) should be supported by the necessary evidence to justify the proposed development. This should include:

- 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 or within a statutory safeguarding zone surrounding an aerodrome or technical site; and
- for an addition to an existing mast or base station, a statement that selfcertifies that the cumulative exposure, when operational, will not exceed International Commission on non-ionising radiation protection guidelines; or
- for a new mast or base station, evidence that the applicant has explored the possibility of erecting antennas on an existing building, mast or other structure and a statement that self certifies that, when operational, International Commission guidelines will be met.

46. Local planning authorities must determine applications on planning grounds. They should not seek to prevent competition between different operators, question the need for the telecommunications system, or determine health safeguards if the proposal meets International Commission guidelines for public exposure."

#### Code of Best Practice on Mobile Phone Network Development (2002)

The Code of Best Practice was published in November 2002 and produced jointly by all Mobile Phone Operators, and representatives of Central and Local Government. It provides clear and practical advice to ensure that delivery of significantly better and more effective communication and consultation between operators, local authorities and local residents.

The limits of permitted development are summarised in the Code of Best Practice on Mobile Phone Network Development in which in paragraph 66 there is particular reference to equipment cabinets less than 2.5 metres in volume.

Paragraph 126 acknowledges the options for design used by an operator will be affected by site conditions, technical constraints, landscape features and capacity requirements. The main options would include mast and or site sharing; and installation on existing buildings and structures.

With regards mast and site sharing it is stated in paragraph 127 that *"it has been a longstanding Government policy objective to encourage telecommunications operators, wherever practicable, to share masts and sites as a means of reducing overall mast numbers."* 

Paragraphs 140 - 145 identify general design principles in which camouflaging or disguising equipment is considered materially appropriate. In reducing the environmental and visual impact of a ground based installation the Code of Best Practice promotes the use of simple and uncomplicated designs.

Concerning the erection of new ground based masts, paragraph 148 provides examples of where the environmental and visual impact of the mast can be greatly reduced. Paragraph 148 states:

- Placing the mast near similar structures. For example, industrial and commercial premises, road signs and lamp posts;
- Using simple and unfussy designs. Masts which have complex designs are more likely to dominate and be in discord with the landscape and have adverse visual impacts; and
- Appropriate colouring.

Annex B, paragraph 5 states that "Radio signals are susceptible to interference and need clear visibility around the site; this means that some locations are not suitable for base station sites. The antennas need to be placed so they can cover the area of the cell and this means that they need to be placed high, often on a building or telecommunications mast. The height required will vary depending on the type of antenna, the area to be covered, surrounding topography and heights of adjacent buildings or trees."

Annex B, paragraph 6 acknowledges that the number of base station sites depends on the area to be covered and the number of people who want to use the service. A new base station may be required to provide coverage, capacity, improve the quality of service and/or to replace an existing site.

#### **Reasons for Siting & Appearance**

From the outset, it should be appreciated that irrespective of the installation's use as a telecommunications base station, the change in form of an existing tall structure will always be, to some degree, a noticeable alteration to those residents and regular passers by found closest. However it should be recognised that visibility or a development's height and design does not automatically result in an overwhelming adverse harm. Similarly, it should be acknowledged that the presence of the existing telecommunications installation on-site may result in a number of preconceptions regarding the new proposal now subject to this application. In reflection it should be appreciated that these opinions may actually derive from the previous planning history and or the siting and appearance relating to the now existing mast. Irrespective of these viewpoints and what has gone before it should be acknowledged that the existing base station is now established on-site, in which this provides a good reference point for the latest scheme's siting and appearance.

In light of the above it is considered that the planning assessment of this case should concentrate on whether the proposed changes in terms of its form when compared to the existing development are significant as to outweigh other material planning matters. Indeed it should also be ascertained as to whether there is still a need for the base station and if there have been any notable changes in terms of the development's site specific siting and surroundings. Also the latest proposal subject to this application should be reviewed against the up to date planning policy regarding telecommunications development.

As discussed previously with regards the choice of design when comparing the appearance of the existing installation with the proposed scheme, it is considered that the latest upgrade development will not undermine the visual amenity of the area. In this respect balanced against the other matters as below, it is considered that the latest CTIL proposal is acceptable.

With regards the need for the development it has been highlighted previously that the existing base station requires upgrading to meet the existing and future 4G demands of mobile users. In this respect it's continue presence and operation is essential in providing network coverage for Telefonica and Vodafone.

It should be acknowledged that a sequential approach to site selection has been taken, whereby the proposal seeks to replace an existing ground based installation found at the application site. It should therefore be acknowledged that the proposed column would not add to the existing clutter of street furniture, as the proposal is a direct replacement for that which already exists on-site. Taking into account the residential nature of parts of the wider area, it is considered that this stretch of Kilburn High Street remains an appropriate stretch of adopted highway controlled land to site a streetworks style proposal. The scheme would be positioned on a wide stretch of pavement which allows for unimpeded pedestrian and vehicular movements. In light of the above it is considered that the upgrade proposal would not be overly intrusive in the street scene and its visual impact would not outweigh the continued need and future 4G demands to provide coverage.

It is recognised that the above application was determined prior to the adoption of the aforementioned NPPF. Nevertheless it is evident that the planning policy context has not altered significantly since permission was initially granted, in which the key principals of telecommunication development are deep rooted in planning policy. In this regard it is reasonable to presume that the NPPF has derived from PPG8 which was applied in the first instance. Therefore it is considered that there is limited material conflict between the latest adopted planning policies used today when compared to the policy context that has gone before. Taking into account the local planning policies which are applicable it is considered that the proposal accords with the Council development plan.

In light of the above the applicant considers that the proposal strikes a good balance between environmental impact and operational considerations.

#### Health & Safety

Court cases have confirmed that the public perception of health risks can be a material consideration within the land-use planning system. However the weight to be attached to this issue has to be determined accordingly in each case by the decision maker. It has been generally held, and widely established at planning appeal, that health concerns are not a sufficient basis alone for withholding planning permission providing it has been demonstrated that the proposed installation will comply with the ICNIRP guidelines.

It should be recognised that it has been long since established that it is Central Government's stance that the planning system is not the appropriate mechanism for determining health safeguards. It remains Central Government's responsibility to decide what measures are necessary to protect public health. Most notably it is Central Government's view that if a proposed development meets the ICNIRP guidelines for public exposure it should not be necessary for a Local Planning Authority, in processing an application for planning permission or prior approval, to consider further the health aspects and concerns about them.

In this respect the operators believe that it is not necessary to consider health effects further. Telefónica and Vodafone as operators are committed to ensuring that all new installations are ICNIRP compliant therefore it is considered that there is no basis for this case to be refused on health and safety grounds or for reasons relating to public concerns about health and safety. An ICNIRP compliance certificate is attached as part of this submission, as required by NPPF paragraph 45, in which the ICNIRP declaration takes into account the cumulative effect of the emissions from the proposed installation and all radio base stations present, at or co-located near to the proposed installation. Radio frequency emissions from the proposed installation will be may times lower than the ICNIRP reference standard in all publicly accessible areas around the installation. In the light of the above information, it is clear that the weight to be given to such concerns should not be so great as to warrant a refusal of the case on health grounds.

#### **Contact Details**

Name: (Agent)	Mono Consultants Limited	Telephone:	028 90 737297
Operator:	Telefónica UK Ltd	Fax no:	028 90 737296
Address:	The Mount	Email Address:	jacquelyn.fee@monoconsultants.com
	2 Woodstock Link		
	Belfast		
	BT6 8DD	_	
Signed:		Date:	07.08.13
	Jacquely Lex Mono Consultants Limited		

(on behalf of CTIL and the above operator)

#### **DESIGN AND ACCESS STATEMENT**

This Design and Access Statement is provided in conjunction with the Supplementary Information Template, drawings and supporting material that was submitted with this planning application.

This statement is submitted pursuant to Article 4C of the Town and Country Planning (General Development Procedure) Order 1995 (as amended)

In accordance with the Code of Best Practice on Mobile Phone Network Development<sup>3</sup>, and published Government guidance, this proposal was drawn up having regard to the need for good design.

In particular:

- Considerations of design and layout are informed by the context, having regard not just to any immediate neighbouring buildings but the townscape and landscape of the wider locality. The local pattern of streets and spaces, building traditions, materials and ecology all help to determine the character and identity of the development.
- The scale, massing and height of proposed development have been considered in relation to that of adjoining buildings; the topography, the general pattern of heights in the area; and views, vistas and landmarks.

The following general design principles have been taken into account in respect of this proposed telecommunications development:

- A proper assessment of the character of the area concerned.
- That the design shows an appreciation of context;

## SITE CONDITIONS, TECHNICAL CONSTRAINTS, LANDSCAPE FEATURES AND CAPACITY REQUIREMENTS

#### Introduction

It needs to be borne in mind that the proposed development is for a mobile telecommunications installation. Hence, access is deliberately restricted, where appropriate, for the security of the installation.

#### **Pre Application Discussions and Negotiations**

A pre-application letter of consultation was sent to the Local Planning Authority seeking their views on the operator's aspirations to upgrade a number of existing base stations within the authority.

An acknowledgement was received from the LPA, in which it was indicated that a pre-application fee would be required for advice regarding the scheme.

In light of the above when balanced against the nature of the upgrade development and matters which would be considered by the LPA in the planning process, it was considered appropriate to progress this application and seek their formal determination.

#### **Documentation Submitted with Application**

- Drawings Ref. No's: 100, 201, 202, 301 and 302 with application site red edged;
- Site Specific Supplementary Information;
- General Background Information for Telecommunications Development;
- Health and Mobile Phone Base Stations document;
- ICNIRP declaration and clarification statement.

#### **Design Component**

#### Use proposed

- The proposed development will consist of a Telefonica base station that will provide existing and future mobile coverage to the Kilburn area for Telefónica UK Ltd and Vodafone Limited.
- The proposal will offer improved services and capabilities to the local community, creating better connections that will have social and economic benefits for the area.
- In the commercial world, companies of all sizes, from sole traders to multi-nationals, take for granted the benefits to business efficiency that mobile communications bring. The added security for travellers is a benefit many people will recognise and most families have come to rely on the convenience and reassurance of instant mobile communications.

<sup>&</sup>lt;sup>3</sup> Paragraphs 120-126.

• The proposal is for a radio base station that consists of radio transmitters and receivers in cabin or cabinet connected to antennas by feeder cable. The antennas can be mounted on ground based masts, roof tops or other existing structures. They must be position at a height that is not obstructed by terrain or buildings to provide the radio coverage needed to the area targeted, 17.4m to top in this particular case.

#### <u>Amount</u>

- The proposal involves the removal of the existing street pole radio base station to be replaced by the installation of a dual user street pole radio base station accommodating 3no. multi-band antennas at the top of the structure;
- Ancillary to the monopole will be 1no. equipment cabinet;

#### Layout

• The proposal takes a similar layout to the existing installation whereby it will be positioned on a section of pavement and takes a linear footprint.

#### <u>Scale</u>

• The proposal involves the removal of the existing 16 metre Streetworks pole and its replacement with a 17.5 metre dual user streetworks style monopole housing antennas mounted together at the top of the structure.

#### Landscaping

• The proposed development has no formal demise and is found on the roadside, in which in this respect there is no landscaping proposed as part of this application.

#### Appearance

- At the base of the monopole there is a 2000mm boxed section measuring 350mm by 320mm, which contains the Remote Radio Heads (RRU). The main stem of the column is cylindrical and will measure 324mm in diameter in which towards the top it will taper to a 540mm diameter antenna shroud. The length of the cylindrical antenna shroud section will be 2500mm.
- The new monopole shall have a galvanised steel finish and the new equipment cabinet will be painted green (RAL 6009).

#### Access

The proposals will be located on a section of pavement alongside the highway hence there will be no compound enclosure and the development will be accessible within the public realm. Nevertheless the ground based equipment cabinets and meter pillar can be likened to other communications and electrical service boxes found in typical street scenes in which similar access operations can be likened. It is likely that once built, the site will be visited infrequently for maintenance purposes only as some works can be achieved remotely via the base station's BT link. It should be recognised that the antennas do not need to be physically maintained once the column is in situ.

However subject to the mast design capabilities maintenance operations may entail optimizing, re-orientating or adding down-tilt to the antennas in order to maximise the coverage offered by the installation. Should the need arise for such works access to the site will be primarily by foot in which the applicant would gain access to the equipment housed within the cabinet. In the event of the antennas within the mast needing to be maintained this will normally be achieved by siting a cherry picker with a hydraulic platform alongside the base station. Not only is it highly improbable that the antennas themselves encounter a fault and hence the use of a cherry picker is very unlikely, but it is of note that should this scenario arise the applicant would be required to approach the applicable Traffic Engineers at the Highways Authority for their approval. The applicant will liaise closely with the Highway Authority regarding site specific and visits involving cherry picker access, in which should it be deemed necessary the works could be planned for a time preferable to the Highways Authority.

#### **Community Safety**

Telefonica designs and operates all its radio base stations in accordance with the radio frequency or electromagnetic field exposure guidelines suggested in the European Union (EU) Council Recommendation of 12 July 1999.

This Recommendation is based on the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines for limiting public exposure to electromagnetic fields. This means that in areas where the general public spends time, exposure levels will be fully within guidelines which the UK Government and the European Union have recommended, and which have the formal backing of the World Health Organisation.

A declaration if ICNIRP compliance is provided as part of this planning submission.

#### **Environmental Sustainability**

The proposed installation will be part of the Telefonica mobile telecommunications network and the development and maintenance of the necessary infrastructure to support that network is a major contributor to the sustainability of businesses. It should also be recognised that mobile telecommunications can help sustainable economic development. Continually improving mobile network coverage and capacity increasingly enables remote working, reducing the need for many people to travel to their traditional places of work. This can assist in reducing impact on transport networks and can enable many businesses to be more responsive to the needs of their customers.

#### **General Background Information for Telecommunications Development**

This document is designed to provide general background information on the development of the Telefónica and Vodafone networks. It has been prepared for inclusion with planning applications and supports network development proposals with generic information regarding;-

- 1. Introduction
- 2. Digital networks
- 3. Site selection process
- 4. Planning policy guidance
- 5. Site or mast sharing
- 6. Councils
- 7. Consultation with schools
- 8. Legal cases
- 9. Further information

Note - All references in this document refer to England only.

#### **1.0 INTRODUCTION**

Over 25 years ago under the Telecommunications Act 1984, a licence was granted to Telefónica and Vodafone to provide wireless (or mobile) phone services utilising unused radio frequencies adjacent to those transmitted for over 50 years by the television industry. Initially because this wireless technology was new and the number of potential customers unknown, a number of tall masts were used to provide basic radio coverage to the main populated areas. The design strategy used was similar to that used by local radio/television i.e. tall masts to cover large distances over all types of topography.

It is important to note that in recent years form has followed function and digital technology has resulted in the development of smaller equipment. In addition, smaller radio coverage areas have resulted in antenna/mast heights being generally reduced. The industry has also been able to develop low impact designs for use in sensitive planning areas such as in Conservation Areas, on Listed Buildings, and in National Parks etc. The wireless telegraph pole solution is just one example of a design which has minimised impact on visual amenity of the local neighbourhood.

#### 2.0 DIGITAL NETWORKS - "2G/3G" OR SECOND/THIRD GENERATION

The Telefónica and Vodafone 2G digital networks were developed in the early 1990s. This digital technology is often referred to as GSM (Global System for Mobile Communications) which is the common European operating standard enabling phones to inter-connect to other networks throughout Europe and Internationally. In April 2000, Telefónica and Vodafone were successful in their bids for two of the five licences available to provide a 'Third Generation' mobile telecommunications service known as '3G' or UMTS.

In addition to voice services, this technology enables Telefónica and Vodafone to offer high resolution video and multi-media applications. Among other things this enables office services, virtual banking, e-retailing, video conferencing and high quality broadband internet access to be provided to users on the move. This is all made possible by higher rates of data transfer allowing wireless broadband access to the Internet for mobile phones and laptop computer data card users.

The 3G radio base station is designed to provide a service via cells in a similar way as the GSM (2G) system but with a few differences. Due to the increased data transfer, the location of 3G base station sites is even more critical. Base stations must be located where the local demand exists in order to provide the required levels of service, otherwise the network will not function.

Telefónica and Vodafone will ensure they comply with planning policy guidance by ensuring apparatus be installed on existing buildings and structures, including masts wherever possible. However, in spite of these efforts, there are likely to be instances where there is a need to install additional base stations to provide contiguous service. This is largely due to the characteristics of radio propagation at this frequency, demands on the service and the high data transfer rates.

It is very important to note that mobiles can only work with a network of base stations in place where people want to use their phones (or other wireless devices). Without base stations, the mobile phones we rely on simply won't work.

#### 2.1 How the cellular radio network works

The building blocks of the mobile telecommunications network are called radio base stations which transmit and receive calls to and from mobile phones using radio waves, similar to those used in domestic television and radio equipment. Radio base stations are often associated with free-standing masts, however they can be located on,

or even inside, existing buildings and other structures. Telefónica and Vodafone use "radio frequencies" to transmit and receive calls at 900 MHz or 1800 MHz for 2G whilst 3G uses slightly higher frequencies within the 2100 MHz range.

#### 2.2 How radio signals are transmitted

The radio signals are transmitted from antennas which are part of the radio base station and cover an area known as a "cell", hence the term "cellular phone". The size of the cell is dependent on a number of factors including: the height at which the radio base station is positioned; the topography of the surrounding landscape; anticipated demand; and the population density in the area.

Radio signal transmission from a radio base station can be likened to water being distributed from a garden sprinkler. The area immediately adjacent to the sprinkler remains almost "dry". However the grass gets progressively wetter moving further away from the sprinkler, until a wettest point is reached. Then the further away from the centre, the ground becomes progressively drier. Radio base stations provide network services in a similar manner. The area immediately beneath the antennas receives limited or, occasionally, no signal. Moving further away, the signal steadily improves until it reaches an optimum level and then gets progressively weaker.

In order to use mobile phones whenever and wherever we are, a network of radio base stations is required to maintain a continuous signal or 'network service' across a geographical area. The network is designed so that the cells from each radio base station slightly overlap. Travelling even a short distance may take us through a number of cell areas. Mobile phones are designed to monitor the strength of signal from surrounding radio base stations and automatically select the clearest signal, which often comes from the nearest site. As you approach the edge of the cell area, the phone will automatically select the adjoining radio base station, to provide a continuous service. This process is known as 'call handover'.

#### 2.3 Factors affecting network services

The siting of a radio base station is largely dependent on the characteristics of the radio signals which they transmit. Physical features such as buildings or landscape can obstruct the signals. In open rural areas one base station can typically cover several kilometres in radius. However in urban areas where surrounding buildings will obstruct the signal, this range can be reduced to as little as a few hundred metres.

#### 2.4 Network Capacity

Radio base station sites can only receive and transmit a limited number of simultaneous calls to and from mobile phones. In areas where the use of phones is particularly high, such as major towns or cities, many sites will reach the maximum number of calls they can process. When a customer attempts to make a call in an area where the network has reached its full capacity, the 'network busy' message is displayed on their mobile phone. In order to continue to meet customer demand and improve the quality of services in these areas, there is a need to increase the capacity of the network to allow more calls to be made.

#### **2.5 Technical Requirements**

Telefónica and Vodafone radio engineers identify the need for a new radio base station where the existing signal strength is insufficient to support network requirements, or where demand on the system is such that we need to increase capacity. The location of each radio base station is determined by the following factors:-

- The proximity of adjacent radio base stations and the signal coverage from them.
- The terrain height of the area and surrounding topography.
- The height and density of the buildings and structures within the area.
- The potential customer demand within the area.
- The service type that is required.

#### **3.0 SITE SELECTION PROCESS**

The following site selection procedures apply to each installation to identify and sequentially discount alternative site options:-

- Following a technical review which identifies need, Telefónica / Vodafone radio engineers undertake a desktop analysis to identify the best way of meeting the site requirement. This is completed by using Telefónica / Vodafone computerised radio propagation modelling tools. These tools show every site on both existing networks and identifies those areas where insufficient signal level exists or where there is a need to increase capacity.
- 2. The desktop search also identifies other operators' existing telecommunications installations. This interrogation of databases ensures any mast-sharing opportunities are maximised. Where available the LPA's mast register is also reviewed.
- 3. The radio engineers define a search area, which is then issued to an acquisition agent who undertakes a detailed ground search with the radio engineer to identify suitable options.
- 4. The acquisition agent will obtain site-specific details to identify those sites that are viable options. The possible options are short-listed according to those that combine the following: location within or close to the search area, a willing landlord with acceptable commercial terms, adherence to planning and environmental

policy, and other site specific issues such as initial power and link availability. These options are then returned to the radio engineers for a computer modelling assessment, taking into account the ground height, potential available antenna height and surrounding obstructions.

- 5. Discussions are offered to the local planning authority to consider local policies and any protected areas and to agree additional public consultation if required. These discussions are used to identify a 'preferred' option.
- 6. A plan for local consultation is drawn up, and where appropriate, a consultation exercise is undertaken with the local community.
- 7. Finally a site survey provides a full structural analysis of the site including confirming power routes and how the site will be linked into the network. Terms with the landlord are then finalised, detailed plans prepared and the application submitted.

Telefónica and Vodafone are committed to ensuring the number and visual impact of any additional sites is minimised. Telefónica and Vodafone will continue to develop and utilise sympathetic and innovative design solutions.

#### 4.0 PLANNING POLICY GUIDANCE ON TELECOMMUNICATIONS

The National Planning Policy Framework (NPPF) was published on 27<sup>th</sup> March 2012. The NPPF supports high quality communications infrastructure and recognises it as a strategic priority. Paragraph 42 states that: *"Advanced, high quality communications infrastructure is essential for sustainable economic growth. The development of high speed broadband technology and other communications networks also plays a vital role in enhancing the provision of local community facilities and services."* 

The NPPF goes on to state in paragraph 46 that: "Local planning authorities must determine applications on planning grounds. They should not seek to prevent competition between different operators, question the need for the telecommunications system, or determine health safeguards if the proposal meets International Commission guidelines for public exposure."

#### 5.0 SITE / MAST SHARING

Telefónica and Vodafone actively encourage and support site sharing for both commercial and environmental reasons. All operators are required to explore site-sharing opportunities under the terms of their licences. Telefónica and Vodafone have implemented a number of measures to identify and maximise site-sharing opportunities through their network sharing agreement.

#### 6.0 COUNCILS

#### 6.1 Moratoria

Government guidance on mobile telecom installations advises that local authorities should make suitable council owned property available to network operators for base station development. If suitable council sites are not made available, operators may have to look for alternative sites which the local community might find less acceptable.

Moratoria may also increase the number of new sites needed as council owned buildings are often better suited for base stations e.g. tall buildings. The operators believe it is preferable to deal with proposed developments on council property on a case by case basis.

#### 6.2 Mast register

Guidance in the Government's Code of Best Practice on Mobile Phone Network Development recommends that local authorities develop a register of local base stations based on a map.

The Code goes on to say, "Ideally, all the information should be available to be viewed electronically and in hard copy. Local authorities should ensure that the mast register is kept up to date and may make a reasonable charge if anybody wishes to obtain a copy of any of the information."

#### 7.0 Consultation with schools

The operators fully comply with Government Guidance on pre application consultation with schools and colleges. They provide evidence to the local planning authority that they have consulted the relevant body of the school or college.

The Government's Code of Best Practice on Mobile Phone Network Development gives guidance on the factors operators should consider when determining whether consultation is required, as each development is different. These factors are equally applicable for Local Planning Authorities who carry out their own consultation once the application has been submitted. A recent report stated that there is no scientific basis for siting base stations away from schools (NRPB report, January 2005)

#### 8.0 LEGAL CASES

The following legal cases may be helpful;-

#### 8.1 Harrogate case November 2004

The Court of Appeal gave a judgment that Government Planning Guidance in PPG8 (now replaced by NPPF) is perfectly clear in relation to compliance with the health and safety standards for mobile phone base stations. The Court of Appeal and the High Court both upheld Government policy in response to a planning inspector's decision that departed from that policy and failed to give adequate reasons for doing so.

#### 8.2 Winchester case November 2004

The Court of Appeal decision upheld an earlier decision by Mr Justice Sullivan that a mobile phone network operator should not use its compulsory acquisition powers as part of its day to day radio base station siting processes.

The Court of Appeal agreed with Mr Justice Sullivan that these far-reaching statutory powers were never intended for use in day to day planning situations and should be used by an operator only as a last resort when there is no other siting alternative. The House of Lords on 16 March 2005 refused leave to appeal the Court of Appeal ruling.

#### 8.3 Bardsey case January 2005

The Court of Appeal confirmed that the permitted development regime for mobile phone base stations is compliant with the Human Rights Act.

This was a case in which a local planning authority failed to comply with its obligations to act within the 56 day period provided under the permitted development regulations.

#### 9.0 FURTHER INFORMATION

We trust the above answers your main queries regarding our planned installation.

The enclosed site-specific details will identify the alternative discounted options and reasons why they were rejected and how the proposed site complies with national and local planning policies.

The Local Government Ombudsman's Special Report on Telecommunication Masts gives some positive recommendations and advice to Local Planning Authorities in determining Prior Approval applications. A copy of the report is available at <a href="http://www.lgo.org.uk/pdf/phone-masts-sr.pdf">http://www.lgo.org.uk/pdf/phone-masts-sr.pdf</a>

#### HEALTH AND MOBILE PHONE BASE STATIONS

We recognise that the growth in mobile technology has led in some cases to public concern about perceived health effects of mobile technology and its deployment, in particular about siting masts close to local communities. Quite naturally, the public seeks reassurance that they are not in any way harmful or dangerous.

We take these public concerns seriously and are committed to providing the latest independent peer-reviewed research findings, information, advice and guidance from national and international agencies on radio frequency (RF) electromagnetic fields.

Telefónica and Vodafone ensure that our radio base stations are designed and operated so that the public are not exposed to radio frequency fields above the guidelines set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). In fact, radio base stations operate at low power and emit low levels of radiofrequency fields, typically hundreds to thousands of times lower than the ICNIRP general public guidelines.

#### **Research Reviews**

There are about 1400 peer-reviewed publications on the biological and health effects of RF signals<sup>4</sup>, which are used in mobile communication technology. The scientific community have collated, summarised and assessed these publications in research reviews, the most influential in the UK being the Mobile Phones and Health Report (also known as the Stewart Report) by the Independent Expert Group on Mobile Phones under the chairmanship of Professor Sir William Stewart. These research reviews are used by Governments to develop policy on exposure to radiofrequency signals.

Published in May 2000, the Stewart Report concluded that the balance of evidence did not suggest that exposures to radio frequency fields below international guidelines could cause adverse health effects, although it acknowledged that biological effects might occur below these values. The report stressed, however, that a biological effect does not necessarily mean a negative impact on health. Walking, drinking a glass of water or listening to music all produce biological effects.

Since 2000, over 30 further reviews have been carried out, carefully considering many hundreds of pieces of research. Most have made similar recommendations and have come to similar conclusions: that research should continue to address any gaps in the knowledge; and that overall, the possibility of adverse health effects from mobile communications remains unproven.

In June 2011 the World Health Organisation (WHO) noted that "A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use" WHO factsheet 193: Electromagnetic fields and public health: mobile telephones. Research reviews are used by guideline setting bodies and Governments to develop advice and public policy on exposure to the signal used by mobile communications technology.

#### **Compliance with International Exposure Guidelines**

All Vodafone and Telefónica installations are designed, constructed and operated in compliance with the precautionary ICNIRP public exposure guidelines as adopted in EU Council Recommendation of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz). These guidelines have been set following a thorough review of the science and take into consideration both thermal and non-thermal effects and are there to protect all members of the public 24 hours a day. In addition, precautionary measures have been taken into account when setting relevant guideline limits for the public (i.e. in the UK a safety factor of 50 times is applied to the public exposure guideline).

When measured, field strengths are typically hundreds to thousands of times lower than the precautionary ICNIRP general public guidelines.

An ICNIRP certificate is provided with every planning application and this certifies that the mobile phone base station, when operational, will meet the precautionary ICNIRP guidelines. We also provide further documentation to clarify that the ICNIRP certificate declares that emissions from all mobile phone network operators' equipment on the site are considered when determining compliance.

<sup>&</sup>lt;sup>4</sup> Source: MMF web site: http://www.mmfai.org/public/research-overview.cfm?lang=eng

#### **ICNIRP Guidelines**

The radiofrequency public exposure limits for EMF fields were developed by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) <u>http://www.icnirp.org</u> following reviews of all the peer-reviewed scientific literature, including thermal and non-thermal effects. ICNIRP is a non-governmental organisation formally recognised by WHO. Established biological and health effects have been used as the basis for the ICNIRP exposure restrictions. The ICNIRP guidelines have been adopted for use in the European Union and the UK.

In August 2009, ICNIRP published a review of the guidelines for limiting RF exposure and concluded that "*it is the* opinion of ICNIRP that the scientific literature published since the 1998 guidelines has provided no evidence of any adverse effects below the basic restrictions and does not necessitate an immediate revision of its guidance on limiting exposure to high frequency electromagnetic fields."

#### **Further Information:**

- World Health Organisation <u>http://www.who.int/peh-emf/en/</u> EMF Project
- ICNIRP <u>http://www.icnirp.org/</u> International Commission on Non-Ionizing Radiation Protection
- Health Protection Agency http://www.hpa.org.uk/HPA/Topics/Radiation/UnderstandingRadiation/1158934607698/
- , UK Mobile Telecommunications and Health Research http://www.mthr.org.uk/
- , UK Mobile Operators Association http://www.mobilemastinfo.com/

#### Or contact:

EMF Enquiries, Cornerstone The Exchange, Arlington Business Park, Theale, Berks, RG7 4TY Tel. 01753 564306, emf.enquiries@cornerstonemobile.net Our ref: 137728\_O2

# CTIL

Head of Planning Camden Council Regeneration and Planning 6th Floor Camden Town Hall Extension Argyle Street London WC1H 8EQ

07.08.13

Dear Sir or Madam,

#### CLARIFICATION OF THE DECLARATION OF ICNIRP COMPLIANCE ISSUED AS PART OF THE PLANNING APPLICATION ATTACHED FOR THE SITE AT FOOTPATH OUTSIDE 358 KILBURN HIGH STREET, KILBURN LONDON, NW6 2QH.

I refer to the Declaration of Conformity with ICNIRP Public Exposure Guidelines ("ICNIRP Declaration"), sent with this application in relation to the proposed telecommunications installation as detailed above.

The "ICNIRP Declaration" certifies that the site is designed to be in full compliance with the requirements of the radio frequency (RF) guidelines of the International Commission on Non-Ionizing Radiation (ICNIRP) for public exposure as expressed in the EU Council recommendation of July 1999.

# The ICNIRP declaration produced by Telefónica UK Ltd takes into account the cumulative effect of the emissions from the proposed installation and <u>all</u> radio base stations present at, or near, the proposed location.

The radio emission compliance calculation is based upon the maximum possible cumulative values. All operators of radio transmitters are under a legal obligation to operate those transmitters in accordance with the conditions of their licence. Operation of the transmitter in accordance with the conditions of the licence fulfils the legal obligations in respect of interference to other radio systems, other electrical equipment, instrumentation or air traffic systems. The conditions of the licence are mandated by Ofcom, an agency of national government, who are responsible for the regulation of the civilian radio spectrum. The remit of Ofcom also includes investigation and remedy of any reported significant interference.

The telecommunications infrastructure the subject of this application accords with all relevant legislation and as such will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest. If you have any further enquiries concerning the "ICNIRP Declaration" certificate or anything else in this letter then please contact the Cornerstone EMF UNIT on 01753 564306.

Yours faithfully,

PROJECT MANAGER Mono Consultants Ltd

For and on behalf of Cornerstone Telecommunications Infrastructure Limited (CTIL) and Telefónica UK Limited as a duly authorised agent

# **O**<sub>2</sub>

#### <u>Declaration of Conformity with ICNIRP Public Exposure Guidelines</u> ("ICNIRP Declaration")

Telefónica UK Limited 260 Bath Road Slough Berkshire SL1 4DX

Declares that the proposed equipment and installation at

Footpath outside 358 Kilburn High Street, Kilburn, London, NW6 2QH

NGR E524689 N184605

is designed to be in full compliance with the requirements of the radio frequency (RF) public exposure guidelines of the International Commission on Non-Ionizing Radiation (ICNIRP), as expressed in the EU Council recommendation of 12 July 1999 \* "on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300 GHz)".

\* Reference: 1999/519/E

07.08.13

Signed

Date

Name Chelsey Swain

Position Project Manager