SUPPLEMENTARY INFORMATION

13PT 0636

1. Site Details

Site Name:	Grassendale	Site Address:	Adopted grass verge on Long Lane, outside Long Lane Recreation Ground, Liverpool, Merseyside, L19 6PN
NGR:	E: 340337 N: 385271		
Site Ref Number:	130168/45120/TBC	Site Type:[1]	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	
If no explain why:		
Was the industry site database checked for suitable sites by the operator:	Yes	
If no explain why:		

Annual roll out consultation with LPA

Date of last annual rollout information/submission:	8 February 2013
Name of Contact:	Stuart Clark
Summary of outcome/Main issues raised:	There were informal discussions with the operators and the above case officer about the overall roll out for Liverpool. Each site will be determined on its own merits.

Pre-application consultation with LPA

Date of written offer of pre-application consultation:	19.2.2013	
Was there pre-application contact:		No
Date of pre-application contact:	N/A	
Name of contact:	N/A	

[1] Macro or Micro

Summary of outcome/Main issues raised: No specific comments received to date.

Ten Commitments Consultation

Rating of Site under Traffic Light Model:	~~Green~~	Amber	~~Red~~
Outline Consultation carried out: Consultation with local Ward Councillors' for Cressington Ward (Cllrs Oglethorpe, Jones and Aspinall) and the local MP M. Eagle. Pre-application consultation letters and drawings of the proposals have been sent to these parties.			
Summary of outcome/Main issues raised: No comments received to date.			

School/College

Location of site in relation to school/college: No schools within 250m of the proposed site upgrade.
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?		No
Has the Civil Aviation Authority/Secretary of State for Defence/Aerodrome Operator been notified?		No
Details of response:		

Developer's Notice

Copy of Developer's Notice enclosed?	Yes	
Date served:	4th March 2013	

3. Proposed Development

The proposed site:

Background

Vodafone Ltd has entered in to an agreement with Telefónica UK Ltd 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 Ltd and Vodafone Ltd ("the operators"). Due to the dramatic rise in the use of mobile data, the industry has had to consider new operating models that are efficient at delivering 3G and 4G services to a much larger percentage of the UK population, as well as supporting 2G services. Both companies pledge to close the digital divide between rural and urban areas targeting 98% indoor population coverage across 2G and 3G by 2015. The agreement will also lay the foundations for two competing 4G networks to deliver the capability for a nationwide 4G service faster than could be achieved independently.

The agreement allows both organisations to pool their basic network infrastructure, while running two, independent, nationwide networks allowing consumer choice. By doing this, they will both reach far more of the country far faster than they could achieve on their own. This single network grid will automatically increase each operator's footprint by 40%, adding competition and choice for customers in areas that previously only had one operator's coverage available.

Following agreement with the two operators, some ownership of the equipment will change to allow the commissioning of the proposed Multi-Operator Radio Access Network ("MORAN") required to deliver the single network grid. This will have little impact from a planning standpoint, however, it forms an important part of the agreement between the companies. It will also provide enhanced capacity for both operators' customers in the future, which will be especially important with the imminent launch of the 4G networks in 2013. Therefore from a customer perspective they won't see any change as customers will continue to use each, operator's network. This agreement is about consolidating infrastructure assets, clearing the way for innovation and the creation of new services that customers really want.

CTIL and Vodafone Limited are looking to progress works which will entail the upgrading of their existing radio base station site on Long Lane. The proposal is to upgrade the site to enable a single network grid supporting modern MORAN technology for both Vodafone Limited and Telefónica UK Limited. The site will be operated by CTIL and Vodafone Limited but the upgrade will enable both operators to provide future MORAN services from the existing site on the adopted grass verge on Long Lane, outside Long Lane Recreation Ground, Liverpool, Merseyside, L19 6PN.

The site is located on the south west side of Long Lane, a dual carriageway, bisected by a deep grass verge containing a number of mature trees. The site is positioned at the back of the adopted grass verge adjacent to the footpath. Further south west is a band of mature trees and Long Lane Recreation Ground.

To the north/north east is Long Lane, the grassed central reservation containing a number of trees and lighting columns, beyond which is the other half of Long Lane, a wide footpath and

further north are residential properties.

The existing radio base station is located at the back of the grass verge and comprises a grey 12m monopole with 3 no. shrouded antennas above to a top height of 14.4m, two equipment cabinets and a meter cabinet located either side of the existing column. The equipment cabinets are finished in a grey colour.

The streetscene is made up of a number of linear items of urban street furniture, most notably existing lighting columns on both sides of the highway, road signage, equipment cabinets, telegraph poles, and mature trees lining the west side of Long Lane and the central reservation.

Enclose map showing the cell centre and adjoining cells:

This is an upgrade to the existing site to fundamentally enable the operators to jointly operate and manage a single network grid across the UK, using MORAN technology, in accordance with the CTIL joint venture arrangements.

Type of Structure Streetworks slim-line column Jupiter S3:
Description:
The proposed development relates to the installation of a radio base station consisting of the removal of the existing 12m slim-line streetworks monopole supporting 3 no. antennas above to a top height of 14.4m as well the removal of one no. equipment cabinet. Installation of a replacement 15m slim-line streetworks column supporting 3 no. antennas, 1 no. replacement equipment cabinet, 2 no. additional equipment cabinets and development ancillary thereto. The antennas within the new structure will be concealed within a cylindrical shroud at the top of the column measuring some 540mm in diameter. At a height of 12.5m the column width is reduced to some 324mm throughout the rest of the column. The development at this location also includes the installation of a replacement equipment cabinet and two small additional equipment cabinets ancillary to the new column itself. They will all be located to the north west of the existing equipment cabinet which will remain in situ. All three equipment cabinets will be located on the same concrete base and will have the following dimensions Alifabs Combiner equipment cabinet 750mmx350mmx1131mm, Huawei BTS3900AL 770mmx750mmx1925mm and a Vulcan 1898mmx798mmx1648mm. All elements of the proposals can be painted to the Local Planning Authority's requirements although grey is suggested to match the existing equipment cabinets already in situ. A grey finish is proposed for the column to match the existing column. The dimensions of the existing equipment cabinet proposed to be removed are 1300mmx925mmx1820mm. It is of note that the proposals seek to upgrade the existing base station in this location. The latest proposal accommodates both operators antennas at an underside height of 12.7m and a top height of 14.7m. The proposed antennas will continue to be screened from sight behind a shroud at the top of the column, and the overall height of the column will only be some 0.6m taller than the existing top height of the shroud column already in situ. The diameter of the column will increase by some 100mm compared to the existing column. For clarification, the existing diameter of the main column is some 224mm for the majority of the column with a shroud diameter of some 400mm. The proposed replacement column will have a main pole width of some 324mm and the pronounced shroud at the top of the column will be 540mm.

Overall Height:	15 Metres
Height of existing building :	N/A
Equipment Housing: Alifabs Combiner Cabinet	
Length:	0.350 Metres
Width:	0.750 Metres
Height:	1.131 Metres
Equipment Housing: Huawei BTS3900AL	
Length:	0.750 Metres
Width:	0.770 Metres
Height:	1.925 Metres
Equipment Housing: Vulcan	
Length:	0.798 Metres
Width:	1.898 Metres
Height:	1.648 Metres

Materials:	
Tower/mast etc – type of material and external colour:	Jupiter S3 - Grey
Equipment housing – type of material and external colour:	Grey

Reasons for choice of design:

The operator Vodafone has occupied this site for a number of years and the site now comprises a 12m slim-line streetworks style monopole with 3 no. shrouded antennas above to a top height of 14.4.m, two equipment cabinets and a meter cabinet. Whilst this column provides 2G/3G coverage to the immediate area for Vodafone, the upgraded site is needed to allow two companies to operate and manage a single network grid across the UK, using MORAN technology. As well as allowing each operator to increase their overall footprint by 40% nationally, it will also enable future 4G in to the network.

The use of MORAN technology will allow the operators to increase their national footprint and enable future 4G technology. To achieve this, a new column is necessary which will allow the required MORAN technology solution within a single streetworks pole. Therefore the applicant's proposals involve the replacement of the existing 12m streetworks slim line monopole with a top height of 14.4m with a new 15m streetworks slim-line column which can accommodate all technologies within the same column. It is highlighted that in continuing to utilise an existing telecommunications installation this would ultimately reduce the need to introduce a new installation in to this cell area. This will avoid the need for added proliferation of new masts within the surrounding area whilst allowing the expansion and improvement of the electronic communications networks, including telecommunications and high speed broadband.

It is acknowledged that the dimensions of the column have changed. The top height of the column is needed to increase by some 0.6m to 15m, the main column width by some 100mm to 324mm and the shroud at the top of the column to 540mm. The additional width and height is essential in order for both operators to be able to fit their MORAN technologies in the same structure allowing all 4 feeders to connect to each antenna and remain hidden from view, negating the need for a new installation elsewhere within this cell area.

It should be recognised that the use of shrouded antennas would eliminate the large number of bracing components associated with other more prominent and conventional telecommunications installations. The applicant has again opted to connect the site into the national network via an underground link rather than rely on a transmission dish, which the applicant judged might affect the linear nature of the design and increase its prominence in the streetscene.

The proposal also includes the erection of three equipment cabinets; one is a replacement for an existing cabinet which is currently located to the south east of the column already in situ. All the new equipment cabinets will be located to the north west of the existing equipment cabinet which is proposed to remain in situ. These proposed equipment cabinets will house the operators MORAN technology equipment and will have the following dimensions 750mmx350mmx1131mm, 770mmx750mmx1925mm and 1898mmx798mmx1648mm.

The equipment cabinets are ancillary to the functionality of the proposed slim-line column and

its antennas, the ground based development is a justified item of street furniture. The equipment cabinet will have an appearance similar to the existing, code system operators' and electrical service boxes found in a streetscene. It is considered that the ground based development will not have a detrimental impact on the visual amenity of the area and through appropriate painting will assist in blending effectively with its surroundings.

It is appreciated that the site may be visible to pedestrians and road users. However, it is considered that the replacement slim-line column at a similar height as the existing column already in situ and in a similar position, in a break from the residential nature of the area where there are numerous trees and several items of urban linear street furniture will ensure that the replacement column will not be seen as detrimental to the visual amenity of the area and character of the streetscene.

It is considered that road users will not have their visibility impaired by the proposed replacement column or additional equipment cabinets owing to the base stations positioning set back from the highway, in alignment with other street furniture and trees along the south west side of Long Lane. The cabinets and pole have been sited on a section of grassed area whereby their presence will not impair the visibility or safety of motorists or pedestrians.

The technical requirements of mobile communication operators such as the applicant are acknowledged in the National Planning Policy Framework which states that local planning authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband.

In address of the appearance of the proposal, it is believed that the scheme takes a form which is sympathetic within the context of its immediate street scene which includes existing lighting columns on both sides of the highway, road signage, equipment cabinets, telegraph poles, and mature trees lining the west side of Long Lane and the central reservation. Aware that some standard mast designs can appear incongruous, it is highlighted that the antennas would remain concealed within a cylindrical shroud and would be integral to the upper most section of the pole. The column is relatively slender, similar to the existing lighting columns in the locality and will blend in with the linear urban items of street furniture which can be found in the immediate area.

Placing masts near similar structures and utilising simple and unfussy designs is acknowledged in the Code of Best Practice on Mobile Network Development to be less likely to dominate and be in discord with the landscape and as a result less likely to have a detrimental impact on the visual amenity of the surrounding area. This design is considered to be an appropriate solution and shows the applicants efforts to help mitigate the proposals impact on the visual amenity, whilst also ensuring that proliferation of masts are reduced by the utilisation of existing structures by two operators as outlined within NPPF and the Council's UDP Policy HD27.

In light of the operators' efforts to design the best solution for this particular site so as to minimise the impact of the development on the environment, it is considered that the appearance of the replacement column would not seriously impact on the visual amenity of the area, nor would it form an obtrusive feature within the streetscape.

It is therefore considered that the proposal before you strikes a good balance between environmental impact and operational considerations. The proposed height and design represents the best compromise between the visual impact of the proposal on the surrounding area and meeting the MORAN technical requirements for the site. Taking all matters into

account it is considered that proposal to deliver the capability for a MORAN service for two competing operators from a single network installation, would not appear out of place within the street scene.

4. Technical Information

ICNIRP Declaration attached 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.	Yes	

Frequency:	2G 900Mhz, 3G 900Mhz and 2100Mhz (and future 4G 800Mhz enabling)
Modulation characteristics[2]	GMSK and QPSK
Power output (expressed in EIRP in dBW per carrier) In order to minimise interference within its own network and with other radio networks, Vodafone Ltd 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 Vodafone Ltd 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.	32 dBW

[2] 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

Height of antenna (m above ground level)	14.7m (top)

5. Technical Justification

Enclose predictive coverage plots.

Reason(s) why site required e.g. coverage, upgrade, capacity (map attached if required):
A mobile phone transmitter is designed to cover a specific area and links its coverage to the next site in the network, creating a patchwork of overlapping coverage 'cells' across the county. So, if a person is on the move, the network will transfer their calls from one site to the next. However, in certain areas there will be gaps between these cells, resulting in a loss of coverage. This can be for a variety of reasons, the most common being topography or buildings which block the path of the signal. The operators' network rollout programme is designed to identify and address these gaps within their coverage and ensure that people can use their phones whenever and wherever they are. The distances between transmitter sites will depend on many factors, including the geography of the mobile services. There is a specific requirement for an upgraded radio base station at this location to allow the two companies to operate and manage a single network grid across the UK using MORAN technology, including the opportunity for future 4G service. This single network grid will automatically increase each operator's footprint by 40%, adding competition and choice for customers in areas that previously only had one operator's coverage available and is a principal reason for the proposed upgrade. Additionally, laying the foundations for a 4G system that provides mobile ultra broadband internet access, e.g. to laptops with USB wireless modems, to smartphones and to other mobile devices, is desirable. 4G provides superfast mobile broadband and will provide better, faster and more reliable mobile broadband connection according to Ofcom's Chief Executive. OfComs Chief Executive also acknowledges that down load speeds will initially be at least 5 to 7 times faster than existing 3G networks. The National Planning Policy Framework states at paragraph 46 that local planning authorities should not question the need for the telecommunications system, which the proposed development is to support. However, for the avoidance of doubt, the proposed installation is needed for both companies, via CTIL to operate and manage a single network grid across the UK using MORAN technology. The Government has expressed its commitment to the UK having the best superfast broadband network (i.e. those services with a headline speed of 30Mbit/s or more) by 2015. It also wants superfast broadband networks to be available to 90% of homes and businesses. According to OfComs Communication Marketing Report 2012 two fifths of adults now own a smartphone (i.e. phones which are specifically designed for the consumption of internet-enabled services such as websites and mobile applications), with the same proportion saying their phone is the most important device for accessing the internet. 39% of UK adults used smartphones in the first quarter of 2012. The growth in smartphone take-up has resulted in increasing use of mobile data services which include accessing websites, downloading applications, using email and instant messaging services on their handsets. It has become so popular that the number of voice calls has been overtaken by such mediums as email, texting

and social networking sites. Ofcom in its 2012 Communications Report also found that for the first time, 52% of call volumes were made from a mobile phone. Ofcom Research 2012 reported that 60% of mobile data users who access the internet do so equally inside and outside the home. The location of most mobile broadband use outside the home is when travelling and indoor public spaces. 3% of UK households now rely on a smartphone as their sole means of home internet access.

Businesses are adopting mobile broadband in greater proportions than consumers according to Ofcom data. The business market share of mobile broadband connections was 27% at the end of 2011. This is largely due to the increasing number of employees wishing to access company data services on the move and the increasing proportion of employees using a laptop.

The area within which an installation needs to be established in order to meet the coverage requirement is constrained by the location and extent of the coverage provided by existing installations in the surrounding area. The proposed scheme utilises an existing established radio base station installation which will be upgraded to provide a single grid network using MORAN technology. This will enable the operators to meet their efficiency, capacity and ever increasing technical capability requirements within a single grid network.

Further detail regarding the general operation of the telecommunications network can be found in the accompanying document entitled 'General Background Information for Telecommunications Development'. This information is provided to assist the local authority in understanding any technical constraints on the location of the proposed development.

6. Site Selection Process

In accordance with the licence obligations and advice in the National Planning Policy Framework and the Code of Best Practice the applicant's network rollout team investigated the following siting and design options using this sequential approach to site selection:

- Upgrading their own existing base stations;
- Using existing telecommunications structures belonging to another communications operator. i.e. Mast and/ or site sharing, co-location;
- Installations on existing high buildings or structures including National Grid pylons;
- Using small scale equipment; and finally
- Erecting a new ground based mast site – (1st) Camouflaging or disguising equipment. (2nd) A conventional installation e.g. a lattice mast and compound.

The applicant's site selection strategy is to keep the overall environmental impact to a minimum. Utilising existing masts is always progressed where it is technically and legally possible and where it is the local planning authority's preferred environmental solution. New sites are only developed where there are no viable or accessible alternatives or it is the local planning authority's preferred approach. The feasibility of the acquisition, build and maintenance of the site also needs to be taken into account.

In accordance with the above sequential approach, and in line with the principles of pooling the two operators existing network infrastructure to create a single network grid, the proposal is to upgrade the existing base station in this location.

Site[3]	Site Name and address	NGR	Reason for not choosing[4]
N/A	N/A	N/A	N/A

If no alternative site options have been investigated, please explain why:

As referred to above, the applicant has taken a sequential approach and is seeking to redevelop an existing installation to enable a single grid network using MORAN technology to service to the local surrounding area. It is considered that utilising an existing established radio base station installation is preferable to pursuing a second base station within the immediate vicinity, as it would reduce the visual impact therefore preserving the character and amenity of the area. Given the makeup of the area and the siting of existing telecoms infrastructure on the site, it was established that the upgrading of facilities through the use of existing infrastructure would be the most viable solution. Based on this sequential approach no other sites have been considered.

Additional relevant information:

[3] ETS – Existing Telecomm site, ES – Existing Structure, RT – Roof Top, GF – Greenfield
[4] SP – Site Provider, RD – Redevelopment Not Possible, T – Technical Difficulties, P – Planning, O - Other

Siting:

The site is located within a break from the residential nature of the area, on back of the grass verge footpath, set against the backdrop of a number of mature trees. Due to technical reasons the replacement column cannot be positioned in the same location as the existing column already in situ. Therefore the operators are proposing to relocate the column as close as possible to the existing pole. To this end, the replacement column will be located some 5m further north west along Long Lane on the other side of the remaining equipment cabinet. As such, for all intents and purposes the replacement column will be positioned in the same general location as the existing telecommunications mast, the siting of which has previously been considered to be acceptable and become part of the established streetscene on the south west side of Long Lane.

The cabinets and column have been sited on the grass verge some distance from the highway, whereby their presence will not impair the visibility or safety of passing motorists or pedestrians.

Although the site is located within a residential area, this is where the operators need to provide the best MORAN service provision. Utilising an existing established radio base station and installing a replacement column at a similar height and having a similar appearance to the existing installation will reduce the number of base stations required and meets with the requirements for minimising the number of radio base stations as set out in NPPF and the Council's UDP. It is therefore beneficial as it will mean that an additional base station will not be required for these two operators within this cell search area.

The proposals will be located on a small section of grass verge hence there will be no compound enclosure and the development will be accessible within the public realm. Nevertheless, the additional ground based equipment cabinet has an appearance similar to other communications and electrical service boxes found in typical streetscenes in which similar operations can be likened. It is likely that once built, the site will be visited infrequently for maintenance purposes only, as is currently the case. Access to the site will be by foot in which the applicant would gain access to the equipment housed within the cabinets. In the event of the antennas within the mast needing to be maintained this will be achieved by siting a cherry picker with a hydraulic platform alongside the base station.

Visual appearance:

The need for additional structures will be kept to a minimum through the removal and replacement of the existing column on the site. However, the operator recognises the need to minimise the visual impact of any new structure on the site. The slim-line column is the thinnest possible in order to house MORAN technology on the same structure, thus allowing both operators to utilise the same apparatus having a similar appearance as the column it replaces albeit at a slightly wider width and taller height.

The proposed minor amendments to the existing column width, shroud diameter and pole height are essential to fit the MORAN technology into the structure, allowing both operators to utilise the same apparatus. As a result 4 feeders and their ports are required for each of the 3 antennas at the top of the column. If the shroud at the top of the column were any slimmer then the multiple MORAN technologies would not be able to fit within the same structure and an additional column would be required, which would lead to the proliferation of masts,

contrary to national and local planning policy.

The replacement column of 15m is required in order to accommodate both operators' antennas and feeders within the same structure at a height which continues to allow clearance of surrounding natural and built features. This will allow the required improvements to network coverage to be provided. As the column is a similar type of column to the one it replaces, the impact on visual amenity within the streetscene will not be detrimental.

The proposed cabinets can be painted in an appropriate colour in order to help it merge with its surroundings, although grey is proposed to match the existing equipment cabinets already in situ.

In light of the operator's efforts to design the best solution for this particular site so as to minimise the impact of development on the environment, it is considered that the appearance of the replacement column would not seriously impact upon the visual amenity of the area, nor would it form an obtrusive feature within the streetscene.

National Planning Guidance

Planning policy is provided at the national level by the National Planning Policy Framework (NPPF). It is a material consideration in planning decisions.

It is not necessary to quote extensively from this document but the following points are highlighted.

National Planning Policy Framework (March 2012)

The governments National Planning Policy Framework (NPPF) was published on 27 March 2012 and consolidates the majority of planning policy documents into a singular circular (including PPG8, and PPS1). The Government's latest thinking strongly supports communications infrastructure. Paragraph 42 of the framework document sets out the objectives of the Communications Infrastructure. It 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'.*

Paragraph 43 states that '*Local Planning Authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband*'. It goes on to acknowledge that the numbers of radio and telecommunications masts and the sites for such installations should be kept to the minimum consistent with the efficient operation of the network. The NPPF supports the use of existing masts, buildings and other structures, unless the need for a new site has been justified. It goes on to state that where new sites are required, the equipment should be sympathetically designed and camouflaged where appropriate.

NPPF paragraph 46 sets out a clear message to local planning authorities on health issues and the need for telecommunications systems. It states 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*'.

Throughout the NPPF there is strong support for sustainable development which is summed up in paragraph 14 which states 'At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan making and decision taking. For decision-taking this means:

- Approving development proposals that accord with the development plan without delay; and
- Where the development plan is absent, silent or relevant policies are out-of-date, granting planning permission unless:

- Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
- Specific policies in this Framework indicate development should be restricted.

Section 7 of the NPPF sets out the requirement for good design and states at paragraph 56 that '*the Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people*'. Paragraph 65 goes on to state that '*local planning authorities should not refuse planning permission for buildings or infrastructure which promote high levels of sustainability because of concerns about incompatibility with an existing townscape, if those concerns have been mitigated by good design*'.

The NPPF sets out 12 core principles which should underpin plan-making and decision-making these principles include that every effort should be made objectively to identify and meet development needs of an area, and respond positively to wider opportunities for growth (para 17).

Annex 1 of the NPPF sets out the implementation of the NPPF and advises in paragraph 214 that for 12 months from the day of publication, decision-takers may continue to give full weight to relevant policies adopted since 2004 [in development plan documents adopted in accordance with the Planning and Compulsory Purchase Act 2004]. Paragraph 215 goes on to state that in other cases and following this 12-month period, due weight should be given to relevant policies in existing plans according to their degree of consistency with this Framework (the closer to the policies in the plan to the policies in the Framework, the greater the weight that may be given).

Code of Best Practice on Mobile Phone Network Development

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.

Due to the character of the cell area being predominately residential, the applicant has designed a relatively slender mast rather than the use of a more traditional monopole column which would be considered incongruous and it is likely that such a proposal would have an unacceptable visual impact in this residential area. It is therefore considered that the use of a 15m high, slim-line pole would eliminate the large number of bracing components associated with other more prominent installation designs such as 'traditional' lattice/monopole structures.

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 the installation the Code of Best Practice promotes the use of simple and uncomplicated designs. Paragraph 148 recognises that *"Masts which have complex designs are more likely to dominate and be in discord with the landscape and have adverse visual impacts."* In this regard, the proposed replacement slim-line column with hidden antennas will ensure that the environmental and visual impact of the equipment remains low as the column itself will appear similar to other vertical structures within the immediate area minimising the environmental and visual impact of the equipment.

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.*

Local Policy

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 as defined by the Planning and Compulsory Purchase Act 2004 comprises the Liverpool Unitary Development Plan and the Regional Spatial Strategy for the North West.

Regional Spatial Strategy for the North West

There are no relevant policies within the Regional Spatial Strategy for the North West which relate to the proposed upgrade to the existing telecommunications installation.

Liverpool Unitary Development Plan (November 2002)

The Liverpool Unitary Development Plan was adopted in November 2002. The policies within the adopted plan were automatically saved on commencement of the Planning and Compulsory Purchase Act 2004 for 3 years i.e. until September 2007. The Secretary of State has since issued a direction to save the majority of policies beyond this 3 year period. As such the Unitary Development Plan policies will continue to form the basis in which planning decisions are made until they are replaced by new policies in the Local Development Framework which will include the Core Strategy, the Sites and Policies Plan and the Waste Local Plan. The Council has prepared the Core Strategy submission draft and consultation of the document has been concluded. However, the adoption of the Core Strategy is over a year away and the Council were unable to provide more definitive timescales. Therefore the policies in the UDP will continue to be a material consideration in the determination of planning applications as long as they are in line with the guidance set out in the NPPF.

Policy HD27 of the Liverpool Unitary Development Plan is a saved policy and relates to Telecommunications development. Therefore telecoms applications are determined in line

with this policy as well as national guidance set out in the NPPF.

The following paragraphs set out how the application complies with the NPPF and Policy HD27 of the Liverpool UDP.

Policy HD27 states that proposals for masts or other structures by telecommunications code systems operators will be considered having regard to the visual impact on the built and natural environment and the technical and operational requirements of the equipment and will normally be permitted provided that a number of criteria are met including:

i) There is no suitable alternative site, structure or building that can be satisfactorily used for the purpose and that there is no reasonable possibility of sharing existing facilities;
ii) The proposal does not have a detrimental effect on the amenity of adjoining premises or on the overall visual amenity or character of an area. Particular attention will be paid to the character or appearance of a listed building or a conservation area;
iii) The proposal is designed, landscaped and screened to minimise their effect on the appearance and amenity of its surroundings; and
iv) The proposal will replace existing masts or structures or will facilitate future network development by reducing the need for additional masts or structures.

In the justification of the policy at Paragraph 7.184 the need to protect amenity whilst addressing operational and technical requirements will be important considerations. Careful siting, design and screening may remove concerns about the visual impact of such apparatus. The use of materials, colours and design should minimise obtrusiveness.

The proposed replacement telecommunications mast, replacement cabinet and additional equipment cabinets fully comply with Policy HD27 of the UDP and the NPPF. Government guidance states that in order to limit visual intrusion the number of radio and telecommunication masts and the sites should be kept to a minimum consistent with the efficient operation of the network. Existing masts, buildings and other structures should be used unless the need of a new site has been justified [NPPF para 43].

The application site is an established telecommunications radio base station. Given that the proposal is to replace the existing site with one capable of allowing both operators to operate from a single telecommunications network grid, then this is in accordance with Policy HD27, NPPF and The Code of Best Practice. This offers the best environmental solution, limiting the amount of new sites required whilst allowing two operators to utilise the same site, limiting the visual intrusion in the area. For the avoidance of doubt, the existing column design would not be able to support all the technologies and their feeders as the existing pole is not designed to fit all this equipment within the same structure.

The principle of a telecommunications base station installation in this location has already been accepted by the Council and become part of the established streetscene. The proposed upgrade to the existing site is sequentially the most preferable option. The operators are looking to upgrade their existing installation to primarily enable two companies to operate and manage a single network grid across the UK, using modern MORAN technology. The design of the replacement column will be as similar as possible to the existing pole minimising the impact on the surrounding area.

The Government fully supports high quality communications infrastructure. NPPF states at

paragraph 43 that local planning authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband. It acknowledges that high quality communications infrastructure is essential for sustainable economic growth. The NPPF also highlights that the development of high speed broadband technology also plays a vital role in enhancing the provision of local community facilities and services.

In accordance with UDP Policy HD27, telecommunications installations must not detrimentally affect amenity of adjoining premises nor the visual amenity and character of the surrounding area. The proposed upgrade fully meets this criteria. The design chosen is one of the most sensitive designs available to the operators' that will allow two telecommunication operators' to utilise the same single site and enable the latest multiple technologies to be provided to the cell area. It is also located where there currently is an established telecommunications installation in almost the same location as the existing column.

The replacement pole will resemble as closely as possible the existing column already in situ in almost the same location. The replacement pole will not have any detrimental impact on its surroundings in terms of its scale, design and siting. The proposed height of the column will be only 0.6m taller than the exiting overall pole already in situ. Given the height above ground level and number of trees in the area this height difference will not be significantly noticeable to the general on looker and users of the highway. The proposed height increase, column width increase of some 100mm to 324mm and shroud increase to 540mm is essential in order to fit all MORAN technologies within the same structure. It is the minimalist solution available to provide the required upgrade and the replacement column will be of similar materials to those already in situ. Without this wider column and slightly taller pole MORAN technologies for both operators on a single site would not be able to be provided. It is therefore likely that the operators would need to install an additional column elsewhere within the cell area to meet their technological requirements. This would lead to the proliferation of masts contrary to local and national planning guidance. Furthermore, given the small increase in width and distance above main eye level, the slightly wider shroud at the top of the mast will not be obtrusive in the streetscene, in an area where there are several other linear structures and numerous trees along Long Lane which will help the replacement mast to blend in with the streetscene.

Policy HD27 part iv supports proposals which replace existing masts or structures or will facilitate future network development by reducing the need for additional masts or structures. The proposed upgrade fully complies with Policy HD27 in this respect. The replacement column will not only replace an existing mast but will also facilitate the future network development by being compliant for two operators, using a single grid network, enabling consumer choice and the latest network development technologies. The replacement mast will avoid the need for a new radio base station and therefore it is the best environmental solution available with minimal impact on the character and appearance of the existing streetscene.

The upgraded installation will meet the aspirations of NPPF which encourages the use of sympathetic design and camouflage to minimise the impact of the development on the environment as well as the utilisation of existing masts. The Code of Best Practice also acknowledges in paragraph 148 that the visual impact of the mast can be greatly reduced if it is placed near similar structures such as road signs, lamp posts and commercial premises. The site is located close to a number of existing lighting columns on both sides of the highway, road signage, equipment cabinets, telegraph poles, and mature trees lining the west side of Long Lane and the central reservation. Therefore the installation should merge into the existing streetscene and not be viewed as an alien feature within its setting. As a result, the

proposed design fully accords with the Code of Best Practice, the NPPF and Policy HD27 of the Council's UDP.

It is acknowledged that there are some residential properties to the north of the site on the north side of Long Lane, located some 40m from the existing apparatus at an oblique angle. There are a number of trees in the central reservation which help to shield the mast from view for the occupants of these residential properties. There are also other linear street furniture such as lighting columns which also help the mast blend in to the streetscene. Given that the replacement pole will be of a similar appearance to the existing column already in situ, together with the distance, orientation and existing street furniture and trees then the proposed upgrade to the existing radio base station will not cause a significant loss of residential amenity. The proposed upgrade therefore fully complies with Policy HD27 of the UDP.

The materials and colouring will be similar to those already in situ and therefore will not appear alien in the streetscene. Therefore the proposals comply with Policy HD27 of the UDP.

Wherever possible the operators reutilise the existing equipment cabinets to house all their MORAN technologies. However, there is not sufficient space within the existing cabinets for all the apparatus to be housed. Therefore the operators are proposing to remove one of the equipment cabinet and replace it with 3 small equipment cabinets. The operators carefully design the equipment cabinets to have a similar appearance to the existing equipment cabinets already in situ as well as any other electrical equipment cabinets utilised by many other statutory undertakers such as BT Openreach, electricity suppliers and highways which are common in all urban areas. The dimensions are similar and can be found in similar locations up and down the country. As such, there would be no detrimental impact on the character and appearance of the area by the installation of such equipment. The equipment cabinets are ancillary to the functionality of the proposed column and therefore the ground based development is a justified item of street furniture.

The NPPF strongly supports sustainable development. Mobile communication plays a significant role in sustainable development. Being able to access the internet via a mobile device allows people to access a wide range of central and local government services, buy groceries, manage finances, apply for jobs/university, and carry out school projects to name just a few of the benefits of being able to use an internet enabled handheld device. It also allows people to work from home or on the move without needing to return to the office. This reduces travel time, carbon emissions and increases the speed in which information is processed/shared.

A study published in September 2012, by mortgage provider ING DIRECT reveals the non-essential aspects of a property that encourage buyers to sign on the dotted line include strong mobile 3G signal. 20% of the people surveyed said that strong 3G signal is desirable. As connectivity is essential to modern day living, buyers rate consistent 3G access in every room as the bare minimum. Therefore as the 4G network is rolled out across the country, demand for the superfast highspeed data capture will increase significantly and as part of the operators license agreement to provide a quality service to their customers they are obliged to upgrade their systems to ensure that their customers have access to the latest technologies. It is also in line with the Governments aspirations for the UK to have the best superfast broadband and which fully supports the expansion of electronic communications networks, including telecommunications and high speed broadband.

The proposed installation conforms to current government planning guidelines regarding potential health effects arising from telecommunications development. The operator has

attached a declaration that the site conforms to ICNIRP guidance. This is in full accordance with NPPF.

The publication of the National Planning Policy Framework continues to highlight the Governments view that the planning system is not the appropriate mechanism for determining health safeguards. It sends a clear message to local planning authorities stating that they 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'.*

In this instance, the applicant believes that it is not necessary to consider health effects further, as recommended by NPPF. The operator is committed to ensuring that all new and existing installations are ICNIRP compliant, and consequently it is considered that there is no basis for this application to be refused on health and safety grounds or for reasons relating to public concerns about health and safety. ICNIRP compliance certificates are enclosed for the operator with this application. If required, additional information regarding the operation of mobile telephone base stations and health and safety considerations can be provided.

The replacement installation will continue to enable the operator to provide a high quality service to its customers and access to the latest technologies. An installation located outside this area would not allow the operator to provide their desired level of multi technologies coverage and capacity.

Summary

To summarise the case in favour of the proposals the following points are of relevance:

- With specific regard to telecommunications development, the proposal accords fully with Policy HD27 of the Liverpool UDP, NPPF and the Code of Best Practice;
- Site selection was progressed in accordance with the applicants licence obligations, advice in NNPF and the Code of Best Practice and represents the least environmentally intrusive, technically suitable, available option;
- The significance of the proposal in the development of two competing companies to operate and manage a single network grid using modern MORAN technologies across the UK is a material consideration. By pooling the operators' basic network infrastructure, this will:
  - Automatically increase each operator's footprint by 40%, adding competition and choice for customers in areas that previously only had one operator's coverage available.
  - Close the digital divide between rural and urban areas targeting 98% indoor population coverage across 2G and 3G by 2015.
  - Lay the foundations for two competing 4G networks to deliver the capability for a nationwide 4G service faster than could be achieved independently.
- With the advent of smartphones and tablet computers the demand for indoor 3G coverage and high speed data capture is increasing rapidly and the operators are obliged to meet this demand and provide a high quality service in line with the NPPF guidance.
- An existing structure is being upgraded by the applicant with minimal alterations in order to allow the operators to manage a single network grid and which fully accords with NPPF guidelines;
- The operators site selection strategy is to keep the overall environmental impact to a minimum through utilising the same sites wherever possible. The operators are utilising the same site where it is technically and legally possible and is the sequentially preferable

environmental solution;

- The proposals would not constitute a proliferation of telecommunications installations as advocated by NPPF;
- The height of the proposed replacement column (at 15 metres to the top) is a similar height compared to the existing column. The replacement is required because the existing infrastructure cannot support multiple MORAN technologies for both operators on a single site. The proposed alterations have been kept to the absolute operational minimum to clear the immediate buildings/clutter/trees and provide adequate service coverage and capacity for the operators to the immediate area.

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