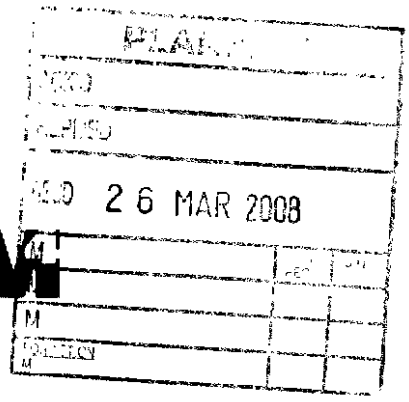

FREEDOM4

ERICSSON

Design and Access Supporting Statement

Introduction

This statement forms part of an application on behalf of our client Ericsson Limited which is establishing a Wi-MAX electronic communication service for FREEDOM4. It has been prepared in accordance with the requirements of Section 62 of the Town and Country Planning Act 1990 (as substituted by Section 42 of the Planning and Compulsory Purchase Act 2004) which requires the submission of a Design and Access Statement to accompany planning applications.

Nominal Number	MAN0006	Candidate Number	
Site Name	111 Piccadilly		
Site Address	111 Piccadilly, Manchester, M1 2HY		
Easting	384655	Northing	398085
Site Type	Hub		

Description of Development	
The installation of a Wi-Max base site comprising three paired antenna systems each with two no. antenna sectors. Five no. 300mm diameter dish antenna, radio equipment housing and development ancillary thereto.	
Height to under side of antenna	59 metres
Height of existing building (where applicable)	61 metres

Radio Equipment Housing	
Length	726 metres
Width	726 metres
Height	1707 metres
Materials	Steel
External colour	Grey

Support Structure	
Materials	Steel
External colour	Galvanised

Background

FREEDOM4 is the operator of an electronic communications network. It complies with the Electronic Communications Code as enacted under the Communications Act 2003, which provides the necessary legislative basis to run an electronic communications network. The network the FREEDOM4 is rolling out is a Wi-Max wireless broadband network.

This Statement complies with the Notification requirements of regulation 5 of The Electronic Communications Code (Conditions and Restrictions) Regulations 2003 as required by the Communications Act 2003. FREEDOM4 is obliged, under regulation 6(2) to give one calendar month's notice, in writing, to the planning authority of its intention to install electronic communications apparatus.

Planning Application

This application is made under Section 62 of the Town and Country Planning Act 1990 (as amended).

Wi-Max Coverage Requirement and Surrounding Network

This installation is required to provide Wi-Max coverage to the Piccadilly area of Manchester. The Technical Justification, that also forms a part of this application, provides an explanation of the operation of the network and the technical constraints on siting. Three radio coverage plots have also been provided that show: 1 - Coverage from the proposal site; 2 – Coverage from Surrounding Sites; and 3 – Coverage from the Proposal Site and Surrounding Sites.

List of Adjacent Nominals

Details of the existing/proposed surrounding sites within the Pipex Wireless network are listed below.

Direction (e.g. N, NE)	**Nominal**	**Site Name and Address**	**NGR**		**Installation Type** (eg ground based mast, rooftop)	**Status** (eg built, site requirement)
			Easting	**Northing**		
NW	MAN0007	Dial House	383658	398732	Rooftop	Site Selected
SE	MAN0001	Dolphin Mill	385456	397122	Rooftop	Site Selected
SW	MAN0005	Centurion House	383636	398147	Rooftop	Site Selected

Search Area and Surrounding Context

The search area within which a site needs to be established is confined to the Piccadilly areas of Manchester. It is of note that the nominal area was initially located around the Northern Quarter, however due to rental demands of site providers in this area, lack of viable sites and uninterested property owners, the search area was widened to find a suitable site elsewhere. It should be recognised that given that the FREEDOM4 Wi-Max network is in its early rollout there is no definitive search area providing greater flexibility towards identifying a possible site.

111 Piccadilly is found within Manchester city centre close to Piccadilly railway station. There are a mix of uses within the immediate locality, including retail units, offices and hotel accommodation. 111 Piccadilly is an office block building found on the junction of Duke Street and Piccadilly. The building is a 19 storey property which is approximately 59 metres to parapet level. The parapet wall has small openings along the bottom at roof level and on its exterior the property's name, '111 Piccadilly', and management company, 'Bruntwood', are displayed.

The building currently accommodates rooftop telecommunications equipment by Vodafone, T-Mobile, O2 UK Ltd and Orange PCS. Telecommunications apparatus is sited throughout the roofline and also face mounted to the building façade at lower heights. The building has a flat roof which is accessed internally.

Planning Policy Context

Section 54A of the Town and Country Planning Act 1990 (as amended) states that "in making any determination under the planning Acts, regard is to be had to the development plan, the determination is to be made in accordance with the plan unless material considerations indicate otherwise."

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 purposes 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."

National Guidance

National guidance contained within planning policy statements, planning policy guidance notes and Governmental circulars have been determined to be material considerations in determining planning applications. In this instance, it is our opinion that the following advice is material:

PPG 8 – Telecommunications (2001)

The general policy objective of PPG8 is to *"ensure that people have a choice as to who provides their telecommunications service, a wide range of services from which to choose and equitable access to the latest technologies as they become available."* (Paragraph 2)

Paragraph 7 states that *"each telecommunications system has different antenna type, siting needs and other characteristics. Planning authorities should have regard to any technical constraints on the location and proposed development."*

As noted in paragraphs 19 - 23, in order to limit visual intrusion, the Government attaches considerable importance to keeping the number of radio and telecommunications masts, and the sites for such installations to a minimum by promoting the use of existing masts and site sharing. In particular paragraph 21 encourages the use of existing buildings as part of a sequential approach to site selection.

In the supporting guidance appendix of PPG8, it is recognised in the introductory paragraphs that modern telecommunications are essential and beneficial element in the life of the local community and in the national economy. PPG8 highlights that new communications technology has spread rapidly to meet the growing demand for better communications at work and at home, in business, in public services and in support of electronic commerce. Indeed in paragraph 2 of the appendix it is stated that *"fast, reliable and cost-effective communications can attract business to an area and help firms remain competitive, thus contributing to the achievement of other policy goals, including increased employment opportunities."*

Paragraphs 12 and 13 of Annex 1 provide guidance regarding the siting and appearance of telecommunications facilities. Factors, which a Local Planning Authority should consider when assessing applications for telecommunications apparatus, include:

The height of the site in relation to surrounding land;
The existence of topographical features and natural vegetation;
The effect on the skyline or horizon;
The site when observed from any site, including from outside the authority's own area;
The site in relation to designated areas for their scenic or conservation value;
The site in relation to existing masts, structures or buildings, including buildings of a historical or traditional character;
The site in relation to residential property; and
Any other relevant considerations.

Development Plan and Supplementary Planning Guidance

Section 54A of the Town and Country Planning Act 1990 (as amended) states that "in making any determination under the planning Acts, regard is to be had to the development plan, the determination is to be made in accordance with the plan unless material considerations indicate otherwise."

We are aware that policy DC17.1 represents the most up to date policy for the authority relating to telecommunications. It states: -

"Applications for telecommunications developments will normally be approved if the Council can be satisfied that the development has been sited and designed to minimize its impact on residential amenity and in environmentally sensitive areas. Wherever possible, the Council will expect the potential of existing buildings and masts, including the sharing of such facilities, to be fully explored before agreeing to additional separate development."

Involvement

In order to explore the possibilities with regard to this proposal a pre-application consultation exercise has been undertaken. This commences with the issue of a rollout plan to the LPA. Details of the rollout plan consultation are provided below.

Date of last rollout submission	18.04.07
Name of contact	Julie Roscoe
Summary of outcome / Main issues raised	Introduction to Pipex Wireless technology, now known as FREEDOM4. General rollout for the authority and number of possible sites.

Pre-Application Consultation with LPA

When searching for a site, and following the identification of possible siting and design options, pre-application consultation with the LPA was undertaken:

Date of pre-application contact	28.02.08
Name of Contact	David Robinson
Summary of outcome / Main issues raised	No response.

Local Consultation

Name of Consultee(s)
Cllr Elaine Boyes Cllr Ken Dobson Cllr Marc Ramsbottom
Date of Consultation
28.02.08
Summary of outcome / Main issues raised
Draft drawings provided and list of discounted options. No comments receipted to date from consultees.

Evaluation

Site Search Process

In order to identify a suitable site to meet the coverage objective, FREEDOM4 undertook a comprehensive search of the area. The main criterion that was considered is whether the site provides the optimum environmental and coverage solution. The feasibility of the acquisition, build and maintenance of the site and the implications of conservation and other designations on each site are considered when selecting the preferred site. Comments received as a result of the consultation exercise are also taken into account.

The use of existing buildings and the sharing of masts or mast sites is always progressed where it is technically and legally possible and where it is the local authority's preferred environmental solution. New sites for ground based masts are only developed where there are no viable or accessible alternatives or it is the planning authority's preferred approach.

Identification of Constraints

When looking for a suitable site often the possibility of sharing existing masts is raised as a possible solution, however in order to facilitate this most masts would require redevelopment usually resulting in a taller and bulkier structure. An alternative to 'mast sharing' is 'site sharing' where two or more operators build their own masts on the same site, thereby minimising the overall height of the proposals and confining the impact to one site. The masts need to be a sufficient distance apart to prevent causing interference to each other.

When looking for a suitable site some rooftops are unsuitable due to the structural limitations of the building. Rooftops that already accommodate apparatus can effectively become sterilised as the addition of further apparatus would cause interference to the existing apparatus that would prevent it from working properly.

When looking for a suitable ground based base station site often the possibility of a 'Streetworks' site is explored. Streetworks style installations consist of a slim line pole and an equipment cabinet and are predominantly found on areas of adopted highway land such as a grass verge or pedestrian footpath. As FREEDOM4 Wi-Max base sites require six antennas it is not possible for streetworks type installations to be used.

Mast and Site Sharing Databases

Was the mast register of the authority responsible for planning used to check for suitable sites by the operator or the authority?	Yes
If not, why not?	
Was the industry site database checked for suitable sites by the operator?	Yes
If not, why not?	

List of Sites Considered

Please find attached a list of the sites considered within the search area. Discounted Sites (sites that are unsuitable) are listed along with the reasons why they cannot be used in a table below.

Discounted Options

	Site Name and Address	NGR		Installation Type	Reason for Unsuitability
		Easting	Northing		
1	Westminster House, 11 Portland Street, Manchester, M1 3HU	384406	398123	Rooftop	Freedom4 could not reach an agreement on mutually acceptable terms with the site provider for this building. Therefore, this site has to be discounted as Freedom4 does not have the owner's permission to use their building.
2	1 Portland Street, Manchester, M1 3BE	384519	398224	Rooftop	The site provider did not want to accommodate Freedom4's equipment on this building. Therefore, this site has to be discounted as Freedom4 does not have the owner's permission to use their land.
3	Ramada Jarvis Piccadilly Hotel, Piccadilly Plaza, Manchester, M1 4BD	384074	398266	Rooftop	Freedom4 could not reach an agreement on mutually acceptable terms with the site provider for this building. Therefore, this site has to be discounted as Freedom4 does not have the owner's permission to use their building.
4	City Tower, Piccadilly Plaza, Manchester, M1 4BD	384074	398266	Rooftop	A site in this location would be too high and would spread coverage over too wide an area resulting in an unacceptable level of interference to the surrounding network. Therefore, this site has to be discounted as it does not meet Freedom4's technical requirements.
5	Marlsbro House, 52 Newton Street, Manchester, M1 1ED	384684	398407	Rooftop	This property was discounted by the radio planner as it is relatively low rise in the context of surrounding buildings. Given the height and massing of surrounding taller buildings, a site at Marlsbro House would not provide meaningful wireless broadband coverage to the wider target area. Therefore, this site has to be discounted as an appropriate height can not be secured which would meet Freedom4's technical requirements.

Assessment of the Proposal

Although the proposed antenna will be visible from ground level and the surrounding public areas, it is considered that the degree of visual impact has been kept within reasonable bounds. Firstly the proposed apparatus denotes a site share on a tall building whereby the proposed development has been grouped alongside existing telecommunications equipment. It is considered that the proposals would appear de-minimus within the context of existing telecommunications on the roof whereby the impact on the street scene and building itself will be minimal.

It is appreciated that it may not be possible to completely hide or screen an installation from public view however it is felt that every effort has been made to limit the visual impact of the scheme on the wider locality. It is considered that reasonable steps have been taken to achieve this by grouping telecommunications equipment where possible together. It is of note that the design and siting of the proposed equipment has been restricted due to the space taken up by existing operators. Similarly given the orientation of existing antenna this has sterilized space on the roof top itself which has implicated exclusion areas where further development can not be placed. It is considered that the applicants' decision where possible to site antennas and dishes within the parapet openings will help the proposed telecommunications apparatus appear less cluttered along the roofline so mitigating the impact on the wider area and safeguarding the skyline.

The proposed apparatus will be left grey and/or galvanised, however should an appreciate colour be suggested by the Local Planning Authority, then the applicant would be more than willing to address such matters by condition, should the scheme be approved.

111 Piccadilly is not a nationally recognised or locally listed building. The property is detached and although there are buildings and features with architectural merit within the wider area, it is considered that seen in the context of existing telecommunications apparatus, the proposed development will have a minimal impact on the setting of the surrounding built heritage.

In light of the above the proposal site was selected because out of the available and suitable sites it was considered to be the optimal environmental and network solution. The proposed design represents the best compromise between the visual impact of the proposal on the surrounding area and meeting the technical coverage requirement for the site. It is considered that the proposals will have a minimal impact on the area and in locating on a building currently accommodating existing operators, reduces the need to introduce a ground based solution elsewhere within the immediate locality.

The Design Component

Physical, Social and Economic Context
The applicant has assessed where applicable the physical, social and economic characteristics and relevant planning policies relating to the telecommunications proposal.

Planning Policy Context
It is considered that the proposals accord with the relevant aforementioned Development Plan policies whereby the siting, scale, design and materials of development are sympathetic to the existing site and its users. As discussed previously the proposal seeks to share an existing rooftop facility in the case of erecting antennae on an existing building which already accommodate telecommunications apparatus.

Scale and Amount of Development
The scheme has emerged from extensive site search investigations of alternative sites. The identified site was chosen as part of a sequential approach and given the presence of existing telecommunications operators on the building. The proposed design represents the best compromise between the visual impact of the proposal on the surrounding area and meeting the technical coverage requirement for the site. It is considered that the proposals will have a minimal impact on the area and in locating on a building currently accommodating existing operators, reduces the need to introduce a ground based solution elsewhere within the immediate locality.

Layout and Appearance
The proposals take the form of a rooftop installation comprising three paired antenna systems each with two no. antenna sectors and five no. 300mm diameter dish antenna. A rooftop equipment cabinet is to be sited centrally and cable work ancillary thereto will link to each antenna sector.

Landscaping
It is highlighted that the proposals are found on the roof of a tall building, hence no landscaping is proposed. Nevertheless as noted previously the proposed development could be painted to the requirements of the Local Planning Authority should they deem this approach an appropriate means of mitigation.

In light of the above, the proposal siting and design was selected because out of the available and suitable sites it was considered to be the optimal environmental and network solution. The proposed design represents the best compromise between minimising the visual impact of the proposal on the surrounding area and meeting the technical coverage requirement for the site.

The Access Component

Public Access Statement
Wi-Max base sites are not designed to be accessible by the public. Therefore no specific public access provisions are required to be incorporated into the design of the proposal.

Construction and Maintenance Access
Access to the site for construction and maintenance is indicated on the drawings. Given the proposals siting on the roof of the building, the site will only be accessed by those personnel associated with the applicant. In light of the siting of the antennas on a building and the intended use to provide Wi-Max coverage, the public should have no interest or need to access the apparatus. It should therefore be recognised that access to the proposals is set well away from recognised public rights of way and is remote from pedestrian and vehicular movements within the public realm.

The applicant will make use of existing internal routes during construction and maintenance work. It is likely that once built, the site will be visited infrequently for maintenance purposes only. Right of entry to the site will be by foot in which the applicant will make use of internal access arrangements so as to gain access to the antennas and equipment cabinet located on the flat roof.

Additional Considerations

Health
The proposed apparatus that is the subject of this application 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 Protection (ICNIRP), as expressed in the EU Council recommendation of 12 July 1999 "on the limitation of exposure to the general public to electromagnetic fields (0 Hz to 300 GHz).

An ICNIRP compliance certificate has been prepared and will follow as a part of this application. ICNIRP public compliance is determined by mathematical calculation and implementation 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.

Summary

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

- With specific regard to telecommunications development, the appellant considers that the proposal accords with PPG8 and the applicable policies of the Manchester City Council Local Plan;
- Site selection was progressed in accordance with the appellant's licence obligations, UDP policy and advice in PPG8;
- The proposals utilise a building with existing telecommunications apparatus already present on the roof;
- 111 Piccadilly is found not within a Conservation Area;
- 111 Piccadilly is not a nationally recognised or locally listed building;

- The level of visual impact has been kept within reasonable technical and construction bounds in which the proposals would appear de-minimus within the context of existing telecommunications already present on the roof;
- The applicant have carefully sited antenna elements so as to be as close as technically possible to existing antenna which it is considered will help make equipment appear as a single group;
- Given its de-minimus form in relation to existing telecommunications equipment, it is considered that the proposals are the least damaging form of development and would not create proliferation of telecommunications in the area;
- All aspects of the proposal could be painted to the requirements of the Council as it is considered that this would further mitigate the visual impact of the scheme;
- In accordance with a precautionary approached as recommended by the Government, the application is accompanied by an ICNIRP certificate, which recognises that the proposed development would meet such guidelines. The ICNIRP also takes into account the cumulative effect from all operators present on the roof.