ROYAL BOROUGH OF KENSINGTON & CHELSEA

DOCUMENT SEPARATOR

DOCUMENT TYPE:

APPLICATION FORM





existing access to a

highway

pedestrian

NO

Is inapplicable

Strike out whichever

3. PARTICULARS OF APPLICATION	N		
State whether this application is for:	State Yes or No	If "Yes" strike out any of the following whi	ch are not to be
(i) Outline planning permission	NO	determined at this stage	
		1. Siting 4. External 2. Design 5. Means of	appearance
(ii) Full planning permission	YES	3. Landscaping	
(iii) Renewal of temporary permission	NO	If "Yes" state the date and number of pre-	ious permission
or permission for retention of building or continuance of use		and identify the previous condition.	
without complying with a condition		DateNumber	
subject to which planning permission has been granted.	i	The Condition	
nas been granteu.			
4. PARTICULARS OF PRESENT A	ND PREVIOUS	USE OF BUILDINGS OR LAND	1
State :-	Reside	ential Flats	1
(i) Present use of buildings/land	Not Ar	nlicable	···//
(ii) If vacant the last previous use and		plicable	
period of use with relevant dates.	=++>4 10 10 10 10 10 10 10 1		
5. LIST ALL DRAWINGS, CERTIFIC	CATES, DOCUM	ENTS, ETC; forming part of this applicat	ion
6. ADDITIONAL INFORMATION	State Yes or No		
(a) is the application for non-residential		"Yes" complete PART THREE of this form	
development	res (s	See PART THREE for exemptions)	
(b) Does the application include the winning and working of minerals	No If	"Yes" complete PART FOUR of this form	
(c) Does the proposed development involve the felling of any trees	140.	"Yes" state numbers and indicate precise po	
(d) (i) How will surface water be dispe	osed of ?NatA.p	plicable	************************
(ii) How will foul sewage be dealt	WILD C	plicable	
(e) Materials - Give details (unless the ap	plication is for outline	e permission) of the colour and type of materi	als to be used for:
(i) Walls	۵۱		
Not Applicab	le		
(ii) RoofNot Applicable	ħłicahle		
(iii) Means of enciosure NotcAp	P#ICADIE		
We hereby apply for (strike out which			
(a) Planning permission to car	rry out the developm	ant described in this application and the	
accompanying plans in acc			
(b) Rignning permission to retain the land already ins	ain the building(s) or tituted as described	work(s) already constructed or carried out, on this application and accompanying plans.	
Signed Wallow Telecont Ly	on behalf of.	BT CELLNET DAT	e.z10515C.
AN APPROPRIATE CERTIFICATE M	LIST ACCOMPAN	IV THIS APPLICATION (See Notes Fo	or Applicants)
Certificate A: Where all the land/building is	owned* by the appli	cant	
Certificate B: Where some or all of the land	/building is not owne	d* by the applicant but the name and addre	ess of the
owner(s) is known.			

Certificate C: Where some or all of the land is not owned* by the applicant and where the bwite stip of only part of the remainder is known. Received 2 8 FEB 2002

Certificate D: Where some or all of the land/building is not owned* by the applicant and the applicant has not been able to find out who owns it.

AOACK N C SW SE APPEALS
IO REC ARB F.PLAN CON.DES

^{*} Freeholder or leaseholder with more than 7 years to run.

THE ROYAL BOROUGH OF KENSINGTON & CHELSEA

TOWN AND COUNTRY PLANNING ACT 1990 TOWN AND COUNTRY PLANNING (GENERAL DEVELOPMENT PROCEDURE) ORDER 1995 CERTIFICATE UNDER ARTICLE 7

R /2043

Complete only one certificate, either A, B, C or D to accompany your application (see notes for applicants)

CERTIFICATE A

I certify that:

- No person other than the applicant was an owner (a) of any part of the land to which the application relates at the beginning of the period 21 days before the date of this application.
- None of the land to which this application relates constitutes or forms part of an agricultural holding.

Signed:

On behalf of:

Date:

CERTIFICATE B

I certify that:

- I have/The applicant has given requisite notice to the persons specified below, being persons who on the day 21 days before the date of the application were owners (a) of any part of the land to which the application relates.
- None of the land to which the application relates constitutes or forms part of an agricultural holding.

Owner's name	Address at which notice was served	Date on which notice was served
BORERS INVESTMENTS	6 SLOANE STREET LONJON SWIX 9LF	20 Feb 2002
C/O Marcer AND MA	IRLER	معيانها بالمعالمة والمعالمة والمعالم

R.B.K.C PLANNING

Received 28 FLB 2002

Ex Die HDC TP CAC AD CLU
AOACK N C SW SE APPEALS
IO REC ARB F.PLAN CON.DES

Signed: Date: 20 Feb 2002

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THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA

TOWN AND COUNTRY PLANNING ACT 1990

PART
THREE:

ADDITIONAL INFORMATION FOR NON RESIDENTIAL DEVELOPMENT

TO BE COMPLETED FOR ALL NON-RESIDENTIAL DEVELOPMENT

roducts, and the type of plant/machinery to be installed:		icable				
. If the proposal forms part of a larger scheme or which permission is not at present sought, priefly describe the ultimate development:	Not Appl	icablo	e			
i. If the proposal is related to an existing use on or near the site, please explain the relationship:	Not Appl:	icable	e			
1.	Existing floor space lost (through demo change of us	lition or	Existing floors to be retaine (if any)		Proposed ac floorsp	
(a) What is the total floor space of all the buildings to which the application relates?	N/A	m2	N/A	m2	N/A	m2
(b) What is the amount of industrial floor space included in the above figure?	N/A	m2	N/A	m2	N/A	m2
(c) What is the amount of office floor space?	N/A	m2	N/A	m2	N/A	m2
(d) What is the amount of floor space for retail	N/A	m2	N/A	m2	N/A	m2
trading? (e) What is the amount of floor space for storage?	N/A	m2	N/A	m2	лффа	m2
(f) What is the amount of floor space for warehousing?	N/A	m2 ,	N/A	m2	N/A	m2
(g) Please specify the amount of floor space of any other uses.	N/A	m2	N/A	m2	N/A	m2

(Part Three continues overleaf)

THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA TOWN AND COUNTRY PLANNING ACT 1990



PART THREE: SIDE TWO

5. How many staff will be employed on the site as a result of the proposed development?	This site will be approximately one week to build. A number of different trades are involved who maybe full or part time staff.
(a) full-time	
(b) part-time	
6. State estimated vehicular traffic flow to the site during a normal working day: (a) Heavy Goods Vehicles	A crane will be used for up to two days to deliver the radio equipment to the roof. General trade vehicles will be used the visiting the site during the course of the week.
(b) Other vehicles	
7. Describe parking / loading / unloading provision (also show location on plan unless you are reserving design for further approval).	The relevant road closures notices will be served for the crane etc. Normal vehicular traffic will be expected to use existing parking provisions. A method statement can be provided if required.
8. State nature, volume and proposed means of disposal of any trade effluents or trade refuse:	Not Applicable
9. Please state here if hazardous substances in the quantities listed in Schedule 1 to the Planning (Hazardous Substances) Regulations (1992) will be kept on the land *:	Not Applicable

(* For further information on Schedule 1 of the Planning (Hazardous Substances) Regulations please consult with the Planning Information Office, 0171 361 2079 / 2977).

Signed: Waldon Idecon W On behalf of: Bi Cellnet Lh)	Date: 21/02/02
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Br Celhet US

21/02/02

Waller Town W

Notice No.1

TOWN & COUNTRY PLANNING ACT, 1990

Notice under Section 66 of application for planning permission Planning (Listed Buildings & Conservation Areas) Act, 1990 Notice under Section 11, Part I, of application for Listed Building Consent/Conservation Area Co	rsoni
Proposed development at	
9 WILBRAHAM PLACE, BELGRAVIA, LONDON, SWIX GAE	(a)
TAKE NOTICE that application is being made to The Royal Borough of Kensington and Chelsea Co	uncil by
BT CELLNET	(b)
For planning permission to	
LOCATE A BASE STATION ON THE ROOF OF THE BUILDING CON TING OF E ANTENNAS, SOUT DOOR CABINETS AND ONE PIPLEYER ALONG WITH FEETER CABLES AND ANCILLARY PEUELOPMENT	(c)
If you should wish to make representations about the application, you should do so in writing, within of the date of service of this notice, to the	
Planning Department, The Royal Borough of Kensington and Chelsea Council	(d)
Signed Wallon Telecom LD on behalf of BT CELLNET L+D Date 20/02	<u> </u>

Notice No.2

TOWN & COUNTRY PLANNING ACT, 1990 - - -

Notice under Section 66 of application for planning permission Planning (Listed Buildings & Conservation Areas) Act, 1990

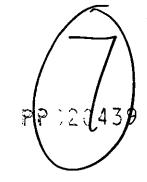
Proposed development at	(2)
	(a)
TAKE NOTICE that application is being made to The Royal Borough of	Kensington and Chelsea Council
ALL HOHOL BELLEPHINE	(b)
For planning permission to	
	· (c)
Any owner of the land (namely a freeholder or a person entitled to under a lease) who wishes to make representations to the above-me should do so in writing, within 20 days of the publication of this notice.	e, to the
	elsea Council
Planning Department, The Royal Borough of Kensington and Ch	
Planning Department, The Royal Borough of Kensington and Cri (d)	

NOTES

(a) Insert address or location of proposed development

(b) Insert name of applicant.

(c) Insert description and address or location of proposed development.





Waldon Telecom Ltd Centennium House Pyrford Road West Byfleet Surrey KTI4 6LD

> Telephone 01932 411011

> Fax 01932 411012

E-mail enq@waldontelecom.com

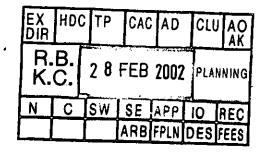
Website

www.waldontelecom.com

Our Ref: AW/32404

The Chief Planning Officer Royal Borough of Kensington and Chelsea Planning & Conservation The Town Hall Homton Street London **W8 7NX**

20 February 2002



Dear Sirs

Re: APPLICATION FOR PLANNING PERMISSION:- PROPOSED BT CELLNET BASE STATION AT 9 WILBRAHAM PLACE, BELGRAVIA, LONDON SWIX 9AE

Please find enclosed an application for planning permission on behalf of BT Cellnet. The proposals are for the installation of 6 antennas mounted on two tripods, radio equipment housing consisting of 5 outdoor cabinets, feeders and development ancillary thereto located on 9 Wilbraham Place, SWIX 9AE.

The application comprises:

- 4 copies of the completed planning application form. 1.
- 2. 4 copies of the completed listed building application form.
- Certificate B under Section 65 of the Town and Country Planning Act 1990. 3.
- 4. 8 copies of drawing nos: 32404-001/002A/003A/004A/005A.
- 5. A cheque for £190 to cover the application fee.
- Supporting information and technical justification 6.
- 7. The relevant coverage plots.
- A copy of the BT Cellnet health and safety brochure. 8.
- 9. A background paper on the Benefits of Modern Communications and how the system works.
- 10. **Photos**







We trust that the information contained is sufficient for you to determine the application, however should you require any further information please don't hesitate to contact the undersigned.

Yours faithfully

ALASTAIR WATTS

Direct line: 01932 411013

Enc.

Our Ref: AW/32404

Chief Planning Officer

Planning and Conservation Royal Borough of Kensington and Chelsea The Town Hall Horton Street London W8 7NX

26 February 2002



Waldon Telecom Ltd Centennium House Pyrford Road West Byfleet Surrey KT14 6LD

> Telephone 01932 411011

Fax 01932 411012

E-mail enq@waldontelecom.com

Website www.waldontelecom.com

Dear Sirs

Re: INSTALLATION OF SIX ANTENNAS, RADIO EQUIPMENT HOUSING AND DEVELOPMENT ANCILLARY THERETO AT 9 WILBRAHAM PLACE, BELGRAVIA, LONDON SWIX 9AE.

NEED FOR THE SITE

BT Cellnet is a Telecommunication Code System Operator licensed under the Telecommunications Act 1984 to provide a public cellular radio telecommunications network. The systems are demand-led and under the terms of it's license BT Cellnet is under a legal obligation to expand and maintain it's network to accommodate customer requirements of service and quality (see PPG8, paragraph 8(ii)) and to ensure that all reasonable demands for service are capable of being met (see Code of Best Practice, part 1.2 paragraph 3).

BT Cellnet currently have a base station located on the BT Telephone Exchange, Sloane Terrace. This base station will be de-commissioned in July 2002 due to the rooftop no longer being available to BT Cellnet. This will seriously disable the network in the Sloane Square area. This proposal is intended as a replacement to the BT Exchange site.

This site is also required to provide third generation services to the immediate area. The licences for 3G services were sold by the government to enable the five radio operators to offer to their customers internet, and other broadband, services. The UK has traditionally been at the forefront of mobile radio services; at an early stage, four operators were licensed to offer the new digital, second generation services and this lead to a highly competitive market where over 60% of the population now own a mobile phone. In order to fully implement new third generation services, each mobile operator will have to increase it's number of transmitter sites. The 3G licensed spectrum is at a higher frequency than the existing second generation transmitters which means that the transmitted signals do not travel as far and this means that transmitters generally have to be closer to each other to provide the same level of coverage. The increase in bandwidth, or amount of information that is transmitted, also means that operators have to build more sites.

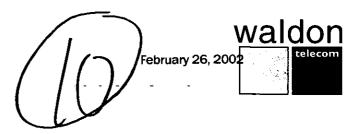
The 3G technology used performs best when sites are of roughly equal height and equally spaced apart. In reality, these requirements are not always met but in order for the network to perform correctly, the search area for any site is relatively small and the difference in height between neighbouring sites cannot be too great. There also needs to be contiguous coverage within any network because any coverage "holes" will mean that customers moving from an adjoining area will not be able to maintain their transmissions and will suffer interruption to their service.

Registered in UK No: 3651880 VAT Registration No: 709 2762 24

Registered Office: Centennium House Pyrford Road West Byfeet Surrey KT14 6LD







It can be clearly seen from the enclosed plots that a large hole in BT Cellnet's network will appear the moment the existing site is removed. In fact the situation is likely to be worse than indicated because these plots are computer generated estimates of coverage, which tend to exaggerate true levels of coverage on the ground because they only take into account general topography. They do not therefore properly reflect attenuation of radio signal that might occur because of manmade features such as buildings and cuttings. The blue infill shows the coverage that would be provided by this proposed replacement site.

DESIGN

Due to the importance of this building, and as advised by the Borough's Conservation dept, the proposal uses a free standing/non-invasive design to retain the integrity of the building. The antennas will be mounted on only two low-slung tripods at the edge of the roof and will be hand-painted to match the existing brickwork/chimneys minimising the visual impact of the scheme. No part of the antennas will protrude above the tops of the chimneys and therefore we believe, due to the complicated and cluttered nature of the rooftop, that the installation will go largely unnoticed from ground level. Originally a scheme was suggested to us by The Council to place as much of the equipment in the centre of the roof as possible to maintain the clean view of the building roof edge from the street. However, due to the requirement for safety zones in front of the antennas, this would necessitate the antennas being mounted on much taller poles of some 5m in height therefore rendering an impact on the skyline and enabling the installation to be viewed from the street. The cabinets housing the radio equipment are located within a 3-sided alcove on the roof rendering them invisible to anyone unless they are on the roof and directly in front of the alcove. The various ancillary development, such as feeder cables, will be sensitively run along the rooftop and will have no impact either visually or in terms of the building's integrity. It is important to realise that this proposed installation uses the smallest possible equipment that will still provide the required coverage.

CONSULTATION AND ALTERNATIVE SITES

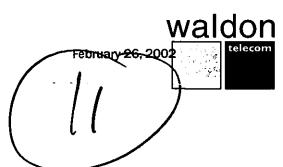
In accordance with local and national policy Waldon Telecom surveyors have undertaken a sequential assessment of alternative sites. This starts with an assessment of existing telecommunications installations with a view to sharing and moves on to other existing tall buildings and structures.

I would like to refer you to our letters/emails/faxes dated 29/11/01, 03/01/02, 15/01/02, 24/01/02 and 11/02/02 to John Shearman and the conservation department whereby guidance was sort from the council and information given. Various telephone conversations were also had. In addition to this we also consulted English Heritage. Immediately prior to this application drawings of the proposal were faxed over to the planning dept for comment, which they declined to make.

In this case the following alternatives were considered: -

- BT Telephone Exchange: The possibility of extending the life of this existing base station has been fully explored and is not possible due to the termination of the existing lease.
- 2. Eaton Mansions: Owned by Grosvenor Estates and requiring consent from the head lessee, which was not given.
- 3. Holy Trinity Church: This building is Grade I * listed building and is therefore more sensitive than that which is proposed here.
- 4. Sloane Terrace Mansions: Whilst this building is available to BT Cellnet, the roof is not capable of accommodating the equipment required.
- 5. Cadogan Estate: The remainder of the suitable buildings in the search area belong to The Cadogan Estate. They are, at the present time, unwilling to allow telecommunications development on their properties.

Page 3



LISTED BUILDING

PPG I 5 sets out the principles underlying how to treat applications affecting Listed Buildings. Of particular importance is the requirement that such development must preserve or enhance such buildings. The precise interpretation of 'preserve' has been considered in numerous cases. The objective of preservation is achieved so long as the installation leaves the character and appearance of the building unharmed. In this case the Listed Building represents by far the most environmentally friendly option, but more importantly through the careful design of the installation, the character of the building can be fully preserved. It should be noted that the roof of this building is extremely "busy" and will dilute the impact of any visible equipment to the point where it does not interfere with the character of the building.

There will be activity during construction but this will be for a very limited period and will have no long-term effect on the receiving environment. Once commissioned the site will only need visiting four times a year for maintenance. The equipment is silent save for small fans, which will not be heard above background noise. Once built, we believe this installation will go largely unnoticed.

CONSERVATION AREA

In this case it is technically impossible to avoid the need to erect the installation within the Conservation Area. BT Cellnet have continued to refine and simplify antenna design to ensure that all new base stations are located in such a way as to achieve a reasonable balance between public demand, technical need and the need to protect the environment. As previously mentioned, this proposal utilises the smallest possible equipment in order to minimise the impact to the Conservation Area.

The test applied to the proposal is that it must 'preserve or enhance the character of the conservation area'. The precise interpretation of 'preserve' has been considered in numerous cases. The objective of preservation is achieved so long as the installation leaves the character and appearance of the conservation area unharmed. Due to the impending removal of more prominent existing equipment within the conservation area, we consider that the proposal has no demonstrable effect on the character and appearance of the conservation area and therefore merits approval.

PLANNING POLICY

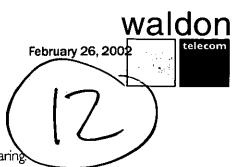
Planning Policy Guidance 8 (PP, G8 Revised) titled "Telecommunications" was issued by the Department of the Environment in December 1992. PPG8 (Revised) advises that modern telecommunications are an essential and beneficial element in the life of the local community and in the national economy.

The aim of telecommunications policy is to ensure that, in the future, people will have more choice as to who provides their telecommunications services and a wider range of services from which to choose. Such a policy is founded on the Department of Trade and Industry White Paper titled Competition and Choice: Telecommunications Policy for the 1990's, issued in March 1991 and is fully supportive of the Governments general policy on telecommunications which is to facilitate the growth of new and existing systems.

Such a policy however, can only realistically be implemented in a manner, which ensures a balance between physical development and the protection of our urban and rural environment. Such important considerations are therefore controlled through Code System Operators licence conditions, which instruct operators to seek to minimise the impact of any development on it's surroundings. On this basis authorities are therefore encouraged to respond positively to telecommunications development proposals especially where the proposed location is constrained by technical considerations.

We submit that this proposal is supported by the presumption in favour of telecommunications development for the following reasons: -

There is an established need for the installation in this location, which stems directly from a technical requirement to replace an existing macrocell in order to maintain coverage and capacity in accordance with the legal requirement to do so contained in BT Cellnet's license. In addition the site is required to enable 3rd generation services to be provided.



- 2) There are no other technically satisfactory alternative sites available for sharing
- 3) The requirement to minimise visual impact, protect visual quality and protect amenity (subject to operational and technical requirements) is fulfilled by the use of the colour-coded antennas mounted on the roof of the building and by locating the radio equipment within an alcove hidden from view.
- 5) All BT Cellnet equipment is tested, licensed and regulated by the National Radiological Protection Board and Health and Safety Executive. All new BT Cellnet equipment complies with these national standards. Consequently no electrical interference or health risks will result from the development.
- The recent report by the Independent Expert Group on Mobile Phone Technology chaired by Sir William Stewart recommended, as a precautionary approach, that the ICNIRP guidelines for public exposure be adopted in the UK. In response to the report, the Government has stated that emissions from base stations should meet the ICNIRP guidelines and that if they do then local authorities need take no further action. We can confirm that the installation will fully comply with the ICNIRP guidelines. This proposal has had an independent risk assessment for radio emissions in order to demonstrate that the equipment proposed will fall well within the more stringent requirements of the European Guidelines (ICNIRP).

CONCLUSIONS

National policy as set out in PPG8 is to facilitate the growth and maintenance of new and existing telecommunications systems and there is a legal obligation to respond to customer requirements of service and quality. There is a demonstrable technical need for the installation, in the public interest, to fill the gap in coverage that will be created by the removal of the existing macrocell located on the BT Exchange. There are no other available/suitable masts or buildings in the vicinity reasonably capable of accommodating the equipment.

The design of the installation has been treated with considerable care and has the benefits set out above. The proposal provides the required coverage whilst minimising any effect on the Listed Building and with the least effect on public amenity.

PPG8 tells us at paragraph 8. (ii) that the greatest need for base stations will be within built-up areas and adjoining main roads. The proposal will fully comply with the requirements of ICNIRP. For these reasons the local authority is respectfully requested to grant permission accordingly. If you have any queries or require further information please do not hesitate to call.

Yours sincerely

ALASTAIR WATTS

Direct line: 01932 411013

Enc.



THE BENEFITS OF MODERN TELECOMMUNICATIONS

- 1. Government policy as indicated in PPG8 is to encourage modern telecommunications as being an essential and beneficial element in the life of the local community and in the national economy; and of benefiting the environment through reducing the need to travel. Although not mutually exclusive or exhaustive, an illustration of common benefits is set out below under three categories HDC TP CAC AD CLU AO AK
 - Local benefits.
 - Contribution to sustainability.
 - Contribution to national economy.

R.B. 28 FEB 2002 PLANNING N C SW SE APP IO REC ARB FPLN DES FEES

The Local Benefits

- 2. The ability of local businesses to operate and compete effectively through access to modern communications can help maintain and increase local employment opportunities. This is particularly significant in the rural areas, which even in the best economic times can still suffer from pockets of poor opportunity.
- 3. Mobile communications are also used by those providing local services, such as doctors, vets, deliverymen and local tradesmen, like electricians and plumbers. Their ability to provide a more responsive and flexible services benefits local communities.
- 4. Access to mobile communications can also bring about greater personal freedom of movement and convenience. To illustrate this, most people would agree with the following statements:
 - If my car broke down or I was in a road traffic accident, then I would like to be able to call a motoring organisation or the emergency services immediately.
 - If my teenage children were out late at night, I would feel less anxious if I knew they could contact me by telephone wherever they are.
 - If I left my children with a baby-sitter at home or an elderly relative for whom I am caring; I would feel more reassured if they could contact me at any time by telephone, wherever I am.
 - If I was running late to see someone, or had to change my plans, I would like to be able to contact them to let them know.

- If I left my home or office and forgot something, I would like someone to contact me to tell me so I could return and pick it up.
- If I was away from my home or office and had to contact someone urgently of receive an urgent message, I would like to be able to do so immediately.

t mg

Contribution to Sustainability

- 5. Mobile communications includes messaging, faxes and data transference (via the use of modems and computers) and accessibility to them is changing the way, in which we live and work. The next generation of services will link these with video and television services. At its simplest, the creation of local job opportunities and full or part time home working, facilitated through access to modern communications help reduce the need to travel. Likewise, being in constant communication can avoid wasted journeys. For example, a business person travelling between locations by car can receive a message that it is unnecessary to go to one of the planned locations if circumstances change; or faxes or electronic mail can be received or sent, from a car without the person having to return to their office.
- 6. At its more complex, mobile communications facilitate modern forms of working such as hot desking and hotelling, so reducing and in some cases eliminating the need for office accommodation. As these modern working practices gain greater hold, so the demand for office accommodation should reduce, and ultimately alleviate the pressure for such development, so making a major contribution to sustainable objectives. In addition, by reducing the number of commuters, the pressure on all forms of transport and the consequential road congestion often experienced during peak hours should be reduced, leading to clear environmental benefits.

Contribution to the National Economy

- 7. All businesses, from large to small, benefit from modern communications that helps them maintain and attract new business and service contracts in a responsive and competitive manner.
- 8. In addition, telecommunications is an increasingly important sector of the economy in its own right. Many thousands of people are now employed throughout the UK directly by telecommunication companies; and by companies which specialise in the manufacture of telecommunications equipment, from handsets to radio masts to sophisticated electronic equipment.
- 9. There are also now many people involved in the sale of mobile communications equipment, often operating from dedicated high street shops.
- 10. Accessibility to modern communications, reductions in the price of calls and customer comfort in using the telephone has also seen the spawning of a range of products and services being sold by way of direct marketing, such as telephone banking and insurance.



In turn, this has seen the development of a large number of call centres, some employing several hundred people, to the benefit of the particular local economies where they are located.

11. With over 34.4 million subscribers, and new subscribers joining by their thousands every week, telecommunications is a key element in society and the economy. Indeed this is recognised in the DTI White Paper *Our Competitive Future* which states at paragraph 4.21:

"Our communications infrastructure underpins much of the economy. Radio based services alone contribute over £13 billion a year to GDP and provide over 400,000 jobs."

- 12. The Government's commitment to modern communications continues, as is evident from the recent auction held for the five new licences for the Third Generation or Universal Media Telecommunication Services. When launched these services will fuse a voice, the data handed visual media and will automatically change are working and living and lifestyles.
- 13. In the Telecommunication Mast Consultation Paper published in July 2000, the Government indicates that one of its core objectives is to make sure that the UK is the best place in the world to carry out electronic business by 2002. It recognises that modern communications is the fundamental bedrock to this.

(6)

HOW THE SYSTEM WORKS

- 1. The cellular system operated depends upon the development of telecommunications infrastructure. Like all forms of infrastructure, there is an associated degree of environmental disbenefit and with telecommunications this is generally the visual aspects of such development. However, the overall benefits of modern telecommunications, encouraged in the public interest are so great that some local disbenefits are an acknowledged fact of having such systems. That said, planning policy and the operators licences quite rightly seek to ensure the associated disbenefits are kept to an acceptable minimum.
- 2. This balancing of factors in the public interest is no different from that which applies to other forms of communications infrastructure. For example, it is generally acknowledged that it is beneficial to have a modern and efficient railway system and that is now being encouraged in planning policy as a means of also helping to achieve sustainable and economic objectives in the national interest. That is notwithstanding the environmental disbenefit of operating railways, which includes a significant land take for tracks and stations and the noise, fumes and disruption associated with the operation of services.
- 3. It is arising out of the special problems and technical needs associated with telecommunications development that installations, which can be visually prominent, are appearing in high numbers throughout the country. These factors are explained in more detail below.

Mobile Communications Networks

- 4. The rationale behind Mobile Communications Networks is that most communications are between individuals rather than offices or homes, where telephones using conventional landlines are usually found. Thus, when an individual is away from the home or office, communication can be frustrated. With a Mobile Communications Network, an individual can be contacted wherever he or she is, provided that is within an area of adequate coverage.
- 5. It is this roaming aspect of the system which makes it so flexible and when linked to computer systems so especially versatile. But these features and their associated benefits can only be realised through the development of a comprehensive network. The full development of the Mobile Communications Networks should also allow real choice to customers in providing a genuine alternative to conventional telephones using landlines. Thus operators are required under the terms of their licences to provide both geographical coverage, and to meet the reasonable demands likely to be placed upon their systems. These demands grow and change with time and have large implications on the quality and capacity of the networks.
- 6. To create the network, cellular technology is used which operates by dividing the country into a series of overlapping cells, which vary in size, depending on likely levels of usage and the topography of the area. To ensure proper mobile communications, the network must form an almost unbroken patchwork of cells over the country.

- 7. The cells are operated by a Radio Base Station, to which individual handsets are linked by radio wave transmission. As a mobile subscriber moves from one cell to another the calls will automatically be transferred or "handed over" to ensure continuous communication. If adjoining cells do not overlap then this process of handing over can fail and a call can be dropped, one of the most frustrating aspects of mobile communications.
- 8. In urban areas, Radio Base Stations can be within 500 metres of each other. Elsewhere spacing can be greater, but even in semi rural areas this can be down to an interval of about 2 or 3 km between sites, and decreasing as the network develops further.
- 9. In addition to holes in coverage caused by a complete absence of sites or too greater interval, so preventing an overlap of signal, there are often localised problems with coverage in existing cell areas. These can occur through blockage or signal attenuation caused by buildings and trees. Local topography can also cause signals to overshoot areas that then fall into shadows within coverage.
- 10. Problems with attaining a link to a network can also be experienced through congestion where those trying to make a connection to the network exceed the call handling capacity of a particular cell. This sometimes necessitates the development of additional installations to provide more capacity or the upgrading of existing sites.

Special Needs and Technical Problems

- 11. Having regard to operational matters, there are four main influences on the choice of siting for new Radio Base Stations.
- 12. First, at a general level, sites should have the following attributes:
 - They must be capable of being developed.
 - They must have reasonable vehicular access.
 - They must be supplied or capable of being supplied with power.
 - They must offer or be capable of offering a reasonable degree of security.
- 13. These factors tend to influence localised siting decisions, but second, all new installations must fit into the existing and emerging national network already established. Thus, new Radio Base Stations usually have to be located towards the middle of the area requiring coverage. As the interval between installations has been decreasing, this constraint is becoming more limiting with less flexibility on siting choice.
- 14. Third, in order to be able to operate effectively the antennae which transmit and receive to and from customers must be situated at a high point in the area requiring coverage, and clear of trees and high buildings which might have the effect of attenuating or even blocking the signal.

- 15. Where radio dishes are required, the fourth influence is the need to obtain direct line of sights to corresponding installations on the network. Siting may therefore be guided by the need to avoid an intervening hill or a row of trees which might block the line of sight required, the alternative being an unacceptable tower height to clear such obstacles.
- 16. It is because of these factors that PPG 8 advises local planning authorities to be aware of the special needs and technical problems of telecommunications development and not to refuse proposals on the basis of policies framed in terms of conventional buildings and land use.