



Coventry City Council

## **SUPPLEMENTARY PLANNING GUIDANCE NOTE 'TELECOMMUNICATIONS – A DESIGN GUIDE' .**



**ADOPTED SEPTEMBER 2005**

## **INTRODUCTION**

This document sets out the Supplementary Planning Guidance (SPG) for telecommunications installations within the City of Coventry. This guidance elaborates Coventry Development Plan 2001 Policy BE16 'Telecommunications' and provides detailed advice on the suitable siting and appearance of telecommunications masts and related equipment.

This Supplementary Planning Guidance aims to elaborate:

- City of Coventry's telecommunications policy;
- Provide guidance for telecommunications operators, and
- Specify Coventry's siting and appearance requirements for telecommunication installations.

Planning Policy Guidance Note 12 (Development Plans) states that 'SPG may be taken into account as a material consideration in the determination of planning applications. The Secretary of State will give substantial weight to an SPG which has evolved from the development plan, and has been prepared in the proper manner'. It also states that 'A public consultation should form part of the SPG preparation and include interested parties. These views should be taken into account before the SPG is finalized'.

## **BACKGROUND**

The telecommunications sector is a vital part of the UK economy, and it is an industry that is innovating and developing rapidly. The Government's policy is to facilitate the growth of new and existing telecommunications systems whilst keeping the environmental impact to a minimum.

New and advanced communications technology has resulted in an increased range of services available both to individuals and businesses. With over 46 million personal mobile phone users, a modern telecommunications system brings significant economic and social benefits. However the Council is conscious of the need to strike the proper balance between environmental objectives and sustainable telecommunications development.

Mobile telecommunications require the use of radio systems. Radio systems need aerials and towers to boost and relay signals. The first mobile phone network was an analogue service which was phased out in 2001. Currently the predominant UK mobile telecommunication network is based on the 1990's second generation digital cellular Global System for Mobile Communications (GSM). This network is maintained by four licensed operators; O<sub>2</sub> (formally BT Cellnet), Orange, T-Mobile (formally One-to-One) and Vodaphone. Each provides 98% coverage of the UK. Two other service providers also provide a 2G service ('3' and 'Virgin') by using this network.

The continued growth in customer demand for second generation services has placed stresses on the capacity of the networks. To accommodate growing customer requirements in terms of improvements to the quality of service delivery, provision of short message services (SMS also known as Texting) and traffic handling capacity, many cells of the individual operator networks now need to be enhanced through the provision of additional base stations and masts.

Progress in telecommunications technology has resulted in the development of a new international standard and services. Known in the UK as the third generation mobile phone system (3G), in April 2000, five Universal Mobile Telecommunications Services (UMTS) licences were granted. The new licence holders include the four existing 2G operators and Hutchinson 3G.

Under the terms of their licence each 3G operator is required to provide network coverage of 80% of the population by 2007. Much of the existing infrastructure can be re-used although the new entrant Hutchinson 3G, is required to build a network from scratch. The higher frequency ranges used by 3G technology means that the area coverage of individual cells is reduced compared to the existing 2G system. This has resulted in an increased demand for new sites for masts and base stations. The improved data handling capacity of 3G technology enables the viewing of pictures and video, however as more data is required to travel between base station and handset to complete a single operation (i.e. sending a picture message) the 3G service is more susceptible to problems involving poor or limited reception. This quality of coverage issue has also resulted in a further demand for new base stations and masts.

In addition to the new 3G licences, TETRA (Terrestrial Trunked Radio) has been developed for use as a secure network for the emergency services. TETRA networks provide an integrated, digital mobile communications system. O<sub>2</sub> is currently developing a national network for the police called Airwave, and as 100% coverage is required many new sites will need to be provided for this network, many in sensitive areas.

## **PLANNING POLICY**

Planning Policy Guidance Note 8 (PPG8), published in April 2001, sets out the Government's planning guidance on the siting and design of telecommunications systems and installations.

PPG8 offers guidance on environmental and health issues and consultation procedures. This guidance can be a material consideration in the determination of planning applications, and in the prior approval process and appeals.

With regard to the siting of telecommunications equipment PPG8 indicates that such proposals should be assessed on the basis of:

- 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 side, including from outside the authorities own area;
- The site in relation to areas designated locally for their scenic or conservation value;
- The site in relation to existing masts, structures or buildings including buildings of a historic or traditional nature; and
- The site in relation to residential property.

The Coventry Development Plan 2001 includes Policy BE16 'Telecommunications' which seeks to strike a balance between the environmental impacts of telecommunications development whilst recognising the Governments general policies of facilitating the growth of new and existing telecommunications networks.

Policy BE16 states that 'proposals for telecommunications equipment should ensure that:

- The equipment is designed and sited to minimize visual intrusion;
- Local amenity is not significantly adversely affected; and
- Equipment provision should not exceed the foreseeable needs of the telecommunications operators.

The supporting text to the policy further states that 'it is necessary to ensure that apparatus is sited and arranged as unobtrusively as possible. Where possible existing masts or apparatus should be used to prevent a cluttered appearance. Sensitive views should be looked at carefully, particularly in the open countryside and in residential areas. Where visual harm is unavoidable the developer must demonstrate that there is no technically feasible and less harmful alternative'.

## **PLANNING PERMISSION.**

The Town and Country (General Permitted Development) Order 2001 (as amended), sets out permitted development rights for telecommunications code system operators. These 'permitted rights' include the erection, alteration or replacement of a mast up to 15 metres in height (except in Conservation Areas, Areas of outstanding natural Beauty and Sites of Special Scientific Interest), subject to a condition that requires the operator to satisfy a 'prior approval procedure'. Under this procedure, the local planning authority has the opportunity to consider only the siting and design of the proposed installation within a 56 day period. The authority is able to refuse approval where they consider that the development will pose a serious threat to amenity. If no decision is issued by the local planning authority within the 56 day period the proposed installation is considered to benefit from 'deemed consent' and can be erected immediately.

Development by telecommunications operators that does not come within the scope of the rights granted by the GPDO will normally require a full planning application. This includes the erection of a mast over 15 metres in height and the installation of equipment on buildings subject to certain threshold levels.

The installation of some equipment may not fall within the definition of development, or may be development which is fully permitted by the GPDO. Such development may include the installation of small antenna systems which are defined as de minimis, the installation of additional antenna on an existing masts (dish antenna are subject to threshold levels) or other equipment which does not have a material effect on the external appearance of the building on which it is to be installed. The local planning authority is normally notified of such proposed installations by a formal Licence Notification.

## HEALTH

The expansion of the mobile telephone network has been in recent years accompanied by growing concerns regarding the potential health risks from exposure to the electromagnetic fields (EMF) generated by mobile phone usage, base stations and transmitters.

The Government has responsibility for protecting public health and in 1999 the Independent Expert group on mobile Phones (IEGMP) was set up to examine the health effects of mobile phone use, base stations and transmitters under the chairmanship of Sir William Stewart. In 2000 the findings of the group were published as the Stewart Report which concluded (para.1.33) that 'The balance of evidence indicates that there is no general risk to the health of people living near to base stations on the basis that exposures are expected to be small fractions of the guidelines. However there can be indirect adverse effects in some cases.' To this end the Government has adopted the ICNIRP (The World Health Organisations International Commission on Non Ionising Radiation Protection) EMF safety guidelines.

With regard to base stations and schools the Stewart report recommended (para1.41) that 'In relation to macrocell base stations sited within school grounds, that the beam of greatest intensity should not fall on any part of the school grounds or buildings without agreement from the school and parents. Similar considerations should apply to macrocell base stations sited near to school grounds'. Given the concern which is often raised by proposed base stations near school premises **The City Council will actively encourage mobile phone operators not to site base stations within the immediate vicinity of school grounds.**

In PPG8, the Government accepted the Stewart Report's specific 'precautionary approach' recommendation in respect of emission controlling and monitoring and transmitter safety zones, and later this approach was adopted by Government with regard to all mobile telecommunications installations. Due to these actions the Government has taken the view that local planning authorities should not implement their own precautionary policies i.e. introducing a ban or moratorium on telecommunications development.

Furthermore PPG8 establishes that the planning system should not duplicate existing controls under other legislation and is not the place to determine health safeguards. It is the Government's view that if a proposed development conforms to International Compliance for Public Exposure Guidelines for Public Exposure to Electromagnetic Fields established by the International Commission on Non Ionising Radiation Protection (ICNIRP), further consideration of this issue should not be necessary by the local planning authority. (These standards are monitored by the Radiocommunications Agency, The Health and Safety Executive and the National Radiological Protection Board).

**Therefore the City Council will expect all applications for either prior approval or planning permission to include confirmation that the proposal would comply with ICNIRP guidelines.**

## ASSESSMENT OF TELECOMMUNICATIONS MASTS

The City Council will seek to strike a balance between the need to protect and enhance the environment within the City, and to make reasonable provision for the operational needs of the network operators.

The aim of the SPG is therefore to assist operators in the selection of sites and design of masts and associated equipment to ensure that the telecommunications development proposed does not have a detrimental effect on the living conditions of residents by reason of visual intrusion. Where installations are likely to have an unacceptable impact on visual amenity the City Council will seek to guide operators towards more suitable locations, or recommend alterations to the type or size of the proposed installation. However, in some instances where it is considered that amendments will not overcome visual harm the City Council will have no option but to refuse such applications or prior notifications.

### Residential Areas.

Within and adjacent to residential areas lattice towers and monopole telecommunications masts are generally inappropriate because of their height and incongruous appearance. Therefore such masts will not generally be permitted in residential areas.

Street works type masts (i.e. lamp columns or telegraph pole designs) may be acceptable within residential areas provided that they will:

- demonstrate that no alternative sites are available;
- not be prominent from the main windows of any adjacent dwellings;
- not be more than 2 metres higher than surrounding lamp columns or telegraph poles;
- be colour coated (including equipment cabinets) to match existing adjacent street furniture;
- be located within an established pattern of existing lamp columns or telegraph poles;
- not be located within visibility sight lines at road junctions or pedestrian crossing points; and
- not be located in a position where the remaining footpath width would be reduced to below 1.5 metres.



STREET WORKS MONOPOLE WELL SITED AND OF COMPARABLE HEIGHT HAS MINIMAL IMPACT WITHIN STREET SCENE



EXCESSIVE HEIGHT AND BULKY DESIGN RESULT IN INCONGRUOUS STREET WORKS INSTALLATION

Mixed Commercial / Residential Areas.

Monopole masts, street works type masts and antenna on buildings may be acceptable in mixed use areas provided that they are sited carefully and designed in relation to dwellings and the street scene.

Monopole masts may be acceptable within mixed use areas provided that they will:

- demonstrate that no alternative sites are available;
- not be visually prominent in the street scene or from dwellings due to height and / or design of structures;
- be screened from public areas by buildings, structures or vegetation;
- not be more than 2 metres higher than their visual screen; and
- be colour coated to reduce visual prominence (including equipment cabinets and security fencing).



POORLY SITED MONOPOLE MAST RESULTS IN INTRUSIVE FEATURE

Locating antenna on buildings can dramatically reduce the need for free standing masts and such proposals will generally be supported providing that they will:

- demonstrate that no alternative sites are available;
- be painted to correspond with the background or to reduce contrast;
- be kept in proportion to the building or structure;
- respect the architectural style of the building;
- have minimal impact above the roof line;
- not be detrimental to views and general skyline
- avoid creating clutter;
- use clean lines and maintain symmetry; and
- demonstrate that no harm to the fabric of a Listed or Locally Listed Building will result through the installation of the equipment.



UNCONTROLLED INSTALLATION OF ROOF TOP EQUIPMENT CAN HAVE CONSIDERABLE IMPACT



WELL DESIGNED ROOF TOP INSTALLATION WITH MINIMAL RESULTING IMPACT

Extra care will need to be taken when installing equipment on Listed Buildings or Locally Listed Buildings or buildings within Conservation Areas.



POOR SITING WITHIN GROUNDS OF LOCALLY LISTED BUILDING

### Industrial Areas.

Telecommunications masts of all types, both freestanding and located on buildings may generally be acceptable in industrial areas. However the visual amenity of both the industrial area and the wider area must be reasonably safeguarded from incongruous structures of excessive height and / or prominence.

All types of telecommunications masts may be acceptable within industrial areas provided that they will:

- demonstrate that no alternative sites are available;
- not be visually prominent in the street scene or from surrounding areas due to height and / or design of structures;
- be screened from public areas by buildings, structures or vegetation;
- be colour coated to reduce visual prominence (including equipment cabinets and security fencing); and
- be capable of carrying additional antenna (mast sharing).



LATTICE MAST WITHIN COMMERCIAL AREA

### Rural & Green Belt Areas

In the Green Belt, which includes the sensitive landscape area of Ancient Arden, covered by Supplementary Planning Guidance, telecommunications development is likely to be inappropriate unless it maintains openness. Inappropriate development may proceed only if very special circumstances are clearly demonstrated, which outweighs the degree of harm to the Green Belt.

In particular proposals for telecommunications masts will need to demonstrate that:

- no alternative sites are available outside the Green Belt;
- there are no suitable opportunities for mast and site sharing;
- they can be assimilated into the landscape or screened by vegetation from important viewpoints;
- not be visually prominent from public open space, public footpaths or dwellings;
- not be prominent on the skyline;
- not be sited so close to other masts and structures so as to create a cluttered visual appearance within an area;
- not include the provision of excessive areas of hard standing or vehicular accesses;
- not result in the loss of native planting;

- include comprehensive landscaping and boundary treatment native to the area; and
- rural character and local distinctiveness will be conserved by limiting standardised treatments in the overall design.



TELEGRAPH POLE MAST WITHIN SEMI RURAL LOCATION