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Directorate of Environment and Regeneration • Planning Services

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## LOCAL PLANNING GUIDANCE NOTE NO.18 TELECOMMUNICATIONS

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### Background

Telecommunications are accepted as an **essential element of modern life which bring benefits to the nation's economic well being and our social environment**. Government policy encourages business, industry, local government and schools to embrace and use new technology. **The industry is growing rapidly**, with public demand and Government requirements for greater network capacity and geographical coverage, competition between operators, and technological innovation. In recent years, fixed link telecommunications have diminished in terms of visual impact with the undergrounding of service cabins. Offsetting this, the rapid growth of radio based telecommunications has prompted the need - because digital systems operate with shorter transmission distances, thereby necessitating more base stations close to the users - for large amounts of equipment, which many people see as unsightly. The Government also seeks to protect the **environment** and is responsible for **public health** issues; both are matters which increasingly concern the public at the local level when proposals for new telecommunications equipment are announced. In the case of each proposal, a balance must be found.

For its part, the Welsh Assembly Government (WAG) recognises the need for access to modern, high-speed telecommunications services throughout Wales, which can help meet the Assembly's sustainable development and equal opportunity commitments, and especially assist those people living and working in remote rural areas.

It is acknowledged also that good quality telecommunications help to reduce the need for travel, and improve community safety by reducing crime.

This Local Planning Guidance Note (LPG) is principally concerned with telecommunications masts and base stations, but includes also a brief section on satellite antennas and other small scale developments relevant to householders and small businesses.

### Policy

The Welsh Assembly Government (WAG) in its "**Planning Policy Wales**" (PPW) of March 2002 states that "Local Planning Authorities are encouraged to respond positively to telecommunications development proposals, while taking account of the advice on the protection of urban and rural areas." Additional Government guidance is given in WAG's "**Technical Advice Note 19 Telecommunications**" (TAN 19) of August 2002 and their "**Code of Best Practice on Mobile Phone Network Development**" published in July 2003, all of which have been taken into account in this document. The Code is non-statutory but the current five operators (O2, Orange, Vodafone, T-Mobile, and 3 Mobile/Hutchinson 3G) have agreed to follow it. TAN 19 describes the technological changes over recent years.

In its overall strategy, the **Flintshire Unitary Development Plan (UDP) at Policy STR2 Transport and Communications**, expresses the expectation that new development will seek to facilitate the provision and use of telecommunications. **Policy GEN 1 General Requirements for Development** aims to ensure that development is not harmful to the natural environment, nor affects the safety and amenity of humans. Proposals for development should incorporate the highest standards of quality and design possible, be carried out in a responsible and appropriate manner, and have the minimum adverse impacts on the physical, social and economic environment around them.

More specifically, three UDP policies apply to telecommunications: **AC22 Location of Installations**, **AC23 New Development and Interference with Telecommunications signals**, and **AC 24 Cable Installation**. These are quoted in **Appendix 1**, which includes also **Policy AC12 Airport Safeguarding Zone**.

### Planning controls

From the planning viewpoint, **TAN 19 identifies four types of telecommunications proposal:**

#### Minor telecommunications development

Some very minor operations or changes of use may not constitute development which requires planning permission. Many of the smallest antenna systems such as television aerials have been treated this way for years. Microcells such as those similar in appearance to burglar alarms or concealed in petrol forecourt signs are also examples. Under the Code of Best Practice, telecommunications operators are requested to provide local planning authorities (LPAs), in this instance Flintshire County Council, with 28 days notice of their intention to install any equipment, except where they have to submit an application for prior approval or for planning permission. This notification is purely for information purposes and involves no fee.



*Minor Telecommunications Development*

### Permitted development rights

Under the Town and Country Planning (General Permitted Development Order) 1995, as amended by the Orders of 2002 and 2006, operators are allowed to carry out certain developments without requiring planning permission except in the Area of Outstanding Natural Beauty, Sites of Special Scientific Interest and in conservation areas, but they must submit details to the LPA to determine within 28 days as to whether prior approval is required for the siting or appearance of the proposal. The 2006 Order revised permitted development (PD) rights to take account of technological changes; Annexes B and C of the Order describe these for antennas installed on buildings of under 15 metres in height and 15 metres or more respectively. There may be circumstances where the exercise of a PD right could have a serious impact on amenity and if the LPA considers that the withdrawal of the right is necessary it may serve a **direction**. A direction regarding operators' apparatus will require the prior approval of the Assembly. Alternatively, the LPA may serve a **breach of condition notice** requiring the re-siting of the equipment, if it believes that the appropriate criteria have not been taken into account adequately. The basis for such an action is that the conditions of the PD rights have not been complied with and therefore the development does not enjoy PD rights. The LPA should suggest the improvement which they have in mind.

Under PD rights telecommunications **apparatus should be removed from the site as quickly as possible when it is no longer required**, and the land, building or structure restored to its previous condition or to any other condition agreed in writing. Failure to do so would give the LPA grounds to serve a breach of condition notice requiring its removal.



*Permitted Development*

The prior application procedure does not apply in respect of **emergency works**, in the sense of urgent repairs and not emergency services, as defined by the Telecommunications Act, 1984 (Paragraph 1 (1) of Schedule 2).

### Prior approval

Before installing certain telecommunications equipment under PD rights, an operator must apply to the LPA for a **determination** as to whether their approval of the siting and appearance is required. The LPA has up to 56 days; if it does not make a decision within that period the development can proceed as submitted.

Prior approval is required for the installation of new ground-based masts up to 15 metres high, radio equipment housing with a volume over 2.5 cubic metres and development ancillary to radio equipment housing, or in Sites of Special Scientific Interest and conservation areas.

Where the proposal is within 2 kilometres of the perimeter of an **aerodrome**, the application for prior approval must include evidence that the appropriate body has been notified, and should then take account of their views. The position in Flintshire regarding the aerodrome is explained later under 'Other aspects'.

### Development requiring planning permission

Where an application for planning permission is required, such as any mast over 15 metres high, large masts on buildings and structures, or development within a protected area, the application should be determined in

accordance with the development plan (for an explanation see General Introduction to this series of Notes) unless material considerations indicate otherwise. The use of conditions may be appropriate.

### Submitting an application

**Developers are strongly urged to make early contact with the Development Control Section of Planning Services** in County Hall, Mold to discuss matters of location and design **prior to the submission of a planning application**. Initial contact should be with the Planning Support Officers in the Development Control Section, telephone 01352 703234.

PPW also advocates pre-application discussions between operators and other organisations with an interest in the proposed development, including any local residents' groups. The Code of Best Practice includes a **Traffic Light Model** which allows a site to be rated by the operator according to its likely sensitivity in terms of environmental, planning and community considerations, and sets out an appropriate level of consultation depending on the results. When submitting the application, in addition to the fee, location and site plans, elevations and the application forms, **the following should be included:**

- A statement outlining the **need for the proposal** together with cell diagrams showing the area of search (which in some cases may extend beyond the county) and justification.
- A statement confirming clearly that the proposal, when operational, **will meet the ICNIRP guidelines** (see below) relating to health considerations, both in itself and cumulatively.
- An assessment of **alternative sites** within the cell in the contexts of sensitive areas and options for mast or site sharing, and the reasons for their rejection.
- Evidence that pre-application consultations have taken place with any nearby **schools and colleges**. ("Nearby" is not defined in Government guidance.)
- An assessment of levels of any **noise** emitted.
- A statement about **site selection**, taking into account landscape, impacts upon sensitive property, and including the impacts of all associated developments such as access works.

### Material planning considerations

The LPA has to consider any development proposals in terms of material considerations. In the case of telecommunications, these relate principally to **siting and design**. (Other aspects with which the public or other third parties may be concerned are dealt with in a later section.)

Under Policy AC22, care must be taken to ensure that the siting and design of new facilities minimises their visual impact from surrounding viewpoints. Innovative design and landscaping approaches may be the most acceptable solution where there is no alternative to locating in a site which is sensitive in landscape terms, but in such cases a feasibility study by a qualified and independent professional will be requested.

The Government attaches considerable importance to the extent to which **sharing of telecommunications masts** is possible, thus keeping to a minimum the number of sites and masts. In line with this approach, Policy AC22 aims to ensure that any **new sites/masts are available to others for use as a shared facility**, which will be dealt with through a condition on a planning consent. In February 2006 there were approximately 80 sites within the county. A **Register of Telecommunications Sites** is maintained by the Council. Prospective applicants are strongly advised to consult this before making an application. In some instances sharing of masts may be the most acceptable solution, and the Council will expect applicants to show that they have considered this option.

Policy AC22 requires adequate provision for the **full restoration and aftercare of the site on any cessation of use**. This will be included as a condition.

### Siting issues

Requirements placed by the Government upon telecommunications operators under the terms of their licences demand that a level of coverage is achieved by certain deadlines, which means that in effect the provision of facilities relates to **geographical cells**. The need for more facilities arises from factors such as:

- providing basic coverage,
- improving reception for particular categories of calls,
- coping with increased capacity and usage within a particular cell, and
- facilitating new developments within the telecommunications sector.

The LPA, for its part, must be realistic about **technical requirements**. The Council recognises that systems must be placed to serve concentrations of people, at home and at work, together with major transport corridors, and that the technical and operational requirements of the operator must be met.

Operators should show that **alternative sites** within the area of search have been assessed and why less sensitive sites are not technically feasible.

A common difficulty is that the equipment will require an elevated position in order to work effectively and masts and antennas require an operating height which allows their signals to clear trees and other obstructions, but such locations are likely to be **prominent sites** which cause visual impact or community concern. Where it is not possible to avoid an open or conspicuous location, sufficient land should be included within the site to allow a satisfactory amount of planting to screen the apparatus.

The following **general design principles** should be regarded as important considerations:

- A proper assessment of the character of the area concerned should have been undertaken.
- The design should be holistic and three dimensional showing the appreciation of context.
- An analysis of the near and far views of the proposal should be included.
- The proposal should respect views in relation to existing landmarks and distant vistas.
- The proposal should seek to preserve the skyline and any roofscapes visible from streets and public spaces.
- The use of sustainable materials in the construction of the development.
- The choice of complementary designs, materials and colours to produce a harmonious development and to minimise contrast between equipment and its surroundings.

The **best locations for telecommunications developments** (that is, the least sensitive sites) include:

- Existing mast sites
- Tall buildings
- Screened buildings
- Street furniture
- Electricity pylons
- Within industrial estates and business parks
- Within or close to mature woodland



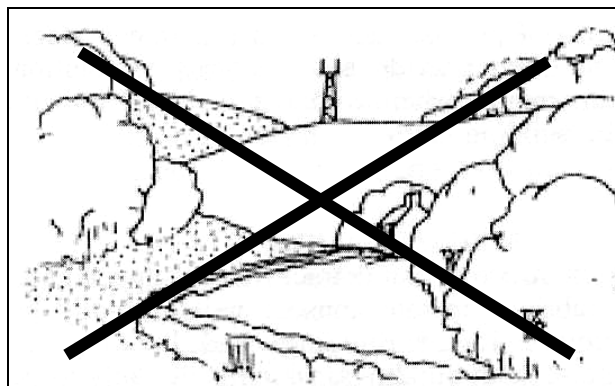
*Installations on existing buildings or structures*

The **worst locations** are the sensitive locations listed under Policy AC22, namely:

- Clwydian Range Area of Outstanding Natural Beauty
- Listed buildings
- Sites of Archaeological and Historic Interest
- Conservation areas
- Historic Parks and Gardens
- Historic Landscapes
- SSSIs
- Wildlife sites

Together with:

- Areas of open countryside
- Grounds around schools, colleges and hospitals
- Residential areas



*Avoid siting masts in open countryside*



In 2001 the mobile phone network operators published their **Ten Commitments** to best siting practice for new development, including improved dialogue and consultation with local communities. The latter includes **annual rollout discussions**, whereby operators share information with LPAs about their plans for the forthcoming year and LPAs provide feedback and general advice to help guide the operators' thinking and plans. These Commitments are listed in **Appendix 2**. It is the Government's intention to monitor progress on the application of the operators' commitments.

### Design issues

Where there is a need for a proposal on a particular site, the LPA will consider the suitability of the proposed design, including the treatment of ancillary development and landscaping. The **options for design** will be affected by the site conditions, technical constraints, landscape features and capacity requirements, and would include:

- Mast and/or site sharing
- Installation on existing buildings and structures.
- Camouflaging or disguising equipment.
- Using small scale equipment.
- Erecting new ground based masts.

### Masts

**Mast sharing** should be considered as a means of reducing or eliminating the need for new masts, but sometimes it may necessitate an existing mast to be increased in height to accommodate more equipment, resulting in greater prominence. In such circumstances, two masts may be a better solution. Sometimes the structure may not be strong enough to take the increased load. Generally **slim line poles** are less intrusive than lattice towers, but in certain locations more **innovative solutions** may be sought to better blend the proposal into the local environment. Masts can be designed to resemble trees or street furniture such as lampposts, or on occasions incorporated unobtrusively on to buildings such as church towers, or in some locations suitably appear in the form of modern art works. **Glass reinforced plastic (GRP)** can be moulded into any shape and coloured appropriately.



*Reducing visual impact*



*Tree masts*

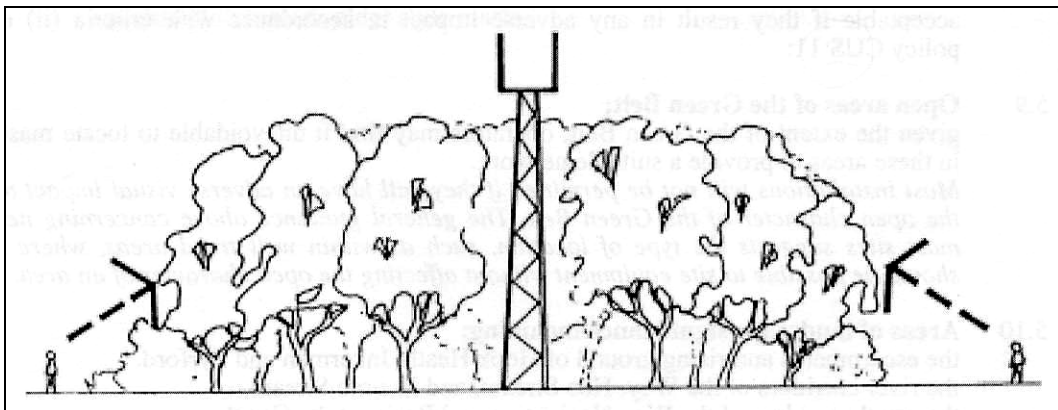
*Masts as modern art*

On **rooftops** a mast or an array of antennas can be highly visible and may be unacceptable. Antennas placed below the roofline or attached to vertical surfaces such as chimney stacks may provide a less obtrusive answer than those which break the skyline.

Where there is no alternative to a **new ground based mast**, its impact can be reduced by:

- Placing the mast near to similar structures, for example industrial and commercial premises, road signs, lampposts.
- Placing the mast within or close to an existing group of trees.

- Using simple and unfussy designs.
- Using appropriate colouring with a non-reflective finish. Against the sky this could be pale grey, in other urban locations darker hues of grey or brown may be appropriate or a colour similar to the building on which it is located. Against a wooded backdrop or in a rural location a matt green or brown scheme would be better, avoiding the brighter greens.



*Mast largely obscured by existing trees*

### Security fencing

This will need to be at least 2 metres high, and could therefore be conspicuous. It should be colour treated during manufacture by powder coating in black, dark green or dark blue. Chain link fencing is too insecure and easily vandalised.

### Equipment cabins

Equipment cabins, cable boxes and other structures should harmonise with their surroundings as much as possible, through the use of suitable materials and colours. Items to serve rooftop installations should be placed inside buildings or concealed by existing structures where possible.

### Planting and landscaping

Masts are too tall to be screened out but their impact can be softened. Utilising existing vegetation will help. Planting and landscaping can screen cabins and fencing. Operators should detail their proposals for landscape mitigation and explain responsibility for maintenance.

### Other aspects

#### Health considerations

Mobile phones and their base stations transmit and receive signals using electromagnetic waves or fields (EMFs). Some EMFs occur naturally like the earth's magnetic field, but man-made sources such as electricity power lines, broadcasting transmitters and telecommunications base stations often give rise to public concern about possible health effects. Health considerations, and the public's perception of risk, can be material considerations in determining applications for planning permission and prior approval. However, PPW states that it is the Assembly's view that **if the development meets the appropriate European Union guidelines from the International Commission on Non-Ionising Radiation Protection (ICNIRP) on the limitation of the exposure of the general public to electromagnetic fields, the LPA processing the application need not consider further the health aspects and concerns** about them. All new base stations are expected to meet the ICNIRP guidelines. This follows the recommendations in the report of **the Independent Expert Group on Mobile Phones (the Stewart Group), "Mobile Phones and Health"**, published in 2000. (This indicated that although there is no conclusive evidence to show that EMFs from telecommunication masts pose a risk to human health, there is enough evidence to suggest that further research is required. The Government's response recommended compliance with the ICNIRP guidelines as a precautionary response.)

Whilst the Council fully appreciates that there may be genuine public concerns about the health implications of telecommunications development, it is not in a position to challenge these when processing an application for planning permission or prior approval if the submitted details show compliance with Government guidelines. **LPAs should not implement their own precautionary policies** such as imposing a ban or moratorium on new telecommunications development or by insisting on minimum distances between new and existing telecommunications development. The Council will expect all applications to provide a **statement of self certification** that the proposal meets the ICNIRP guidelines.

## Radio interference with other electrical equipment

Interference can be of two kinds, electrical and physical. Only where there is clear evidence of significant and irremediable electrical interference will there generally be any justification for taking interference into account in determining a planning application.

## Aerodrome

The UDP (Policy AC12) explains that Hawarden Airport is used by Airbus UK Ltd and Raytheon PLC, and for private flying purposes. The nearby RAF Sealand is used only as a glider training school. A **safeguarding zone** has been identified for Hawarden Airport within which development proposals will be closely scrutinised to ensure that they would not affect the safe and efficient operation of the airport and the airfield. Consultation will be carried out with the Civil Aviation Authority. In practice, where the proposed development is within 3 kilometres of the centre of the runway at Hawarden Airfield, the LPA consults the aerodrome operator, British Aerospace/Airbus.

## Need

PPW makes it clear that LPAs should not question the need for the system that the proposed development is to support, nor seek to prevent competition between different operators. The Assembly Government urges operators and LPAs to carry out **annual discussions about roll-out plans** for the Council's area.

The need for masts is affected by customer usage, their size and the terrain.

Essentially,

- More usage = more masts
- More operators = more masts
- Fewer masts = taller masts
- Smaller masts = more masts.

## Devaluation of property

The possible devaluation of property arising from telecommunication development is not a planning consideration.

## Loss of view

Many telecommunications developments are very prominent. Loss of view for individual householders as such is not a material consideration in determining planning applications. However, if the visual amenity of an area is likely to be adversely affected by a proposal this would be a planning concern, and the Council may seek to ameliorate the impact by screening or landscaping or - if it cannot be made acceptable - refuse the application.

## Satellite antennas and small scale telecommunications developments

With regard to small scale telecommunications, the Government has published free advice entitled "**A Householder's Planning Guide for the Installation of Satellite Television Dishes**". (DETR/Welsh Office, 1998.) This publication explains the circumstances in which planning permission is and is not required, how to minimise the visual impact of installing a dish, how to choose a supplier and installer, and it outlines alternatives to individual dishes. Copies of the guide may be obtained from Planning Services, County Hall, Mold.

However, the **Town and Country Planning (General Permitted Development) (Amendment) (Order) 2006** revises these rights in the light of technological advances to ensure that it does not discriminate between technologies. Antennas cover both microwave and satellite. Annex A of the Order states that up to 2 antennas are permitted, and specifies the sizes and positions on the building, including the fact that antennas are not permitted under the Order on a chimney, wall or roof slope which both faces onto and is visible from a road.

The need for planning permission varies according to the type of property and its location, but **listed building consent** is always required for a satellite antenna or other equipment to be mounted on a listed building or on a building in the curtilage of a listed building. There are also additional restrictions in the county's 32 **conservation areas**. It is, therefore, **always advisable to obtain advice before purchasing and siting a satellite dish**. Contact one of the Planning Support Officers in the Development Control Section of Planning Services in County Hall, Mold. (Telephone 01352 703234)

There are no proven health risks from normal use of such equipment but care should always be taken to ensure that it is securely fixed and will not give rise to injury or damage to property.

## **Appendix 1: The relevant Unitary Development Plan policies**

### **AC12 Airport Safeguarding Zone**

Development will not be permitted which would prejudice the safe and efficient operation of Hawarden Airport and RAF Sealand.

### **AC22 Location of Installations**

Telecommunications installations will be permitted where:

- a. there is no reasonable possibility of sharing existing facilities or utilising suitable existing buildings or structures;
- b. satisfactory steps have been taken to minimise the visual impact both of the equipment itself and any associated infrastructure;
- c. they are available for use as a shared facility; and
- d. the proposals include adequate provision for the full restoration and aftercare of the site on any cessation of use.

Where such installations are proposed within or adjacent to the AONB, they will be permitted only if it can be demonstrated that there are no satisfactory alternative sites.

### **AC23 New Development and Interference with Telecommunication Signals**

In all new development, steps must be taken to avoid causing undue interference to existing telecommunication signals.

### **AC24 Cable Installation**

In housing proposals over 10 units and in major retail, commercial and industrial developments, where appropriate provision must be made for the installation of cables or ducts during the course of construction.



## Appendix 2: The Operators' Ten Commitments

1. Develop, with other stakeholders, clear standards and procedures to deliver significantly improved consultation with local communities.
2. Participate in obligatory pre-rollout and pre-application consultation with local planning authorities
3. Publish clear, transparent and accountable criteria and cross-industry agreement on site sharing, against which progress will be published regularly.
4. Establish professional development workshops on technological developments within telecommunications for local authority officers and elected members.
5. Deliver, with the Government, a database of information available to the public on radio base stations.
6. Assess all radio base stations for international (ICNIRP) compliance for public exposure, and produce a programme for ICNIRP compliance for all radio base stations as recommended by the Independent Expert Group on Mobile Phones.
7. Provide, as part of planning applications for radio base stations, a certification of compliance with ICNIRP public exposure guidelines.
8. Provide specific staff resources to respond to complaints and enquiries about base stations, within ten working days.
9. Begin financially supporting the Government's independent scientific research programme on mobile communications health issues.
10. Develop standard supporting documentation for all planning submissions whether full planning or prior approval.