



5 JULY 2005

Report to the City Council

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# Review of the Siting of Telecommunications Equipment on Council Land and Premises



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## Preface

**By Councillor Michael Wilkes**

Chair, Co-ordinating Overview and Scrutiny Committee



This has been a particularly challenging – and interesting scrutiny review. Mobile telecommunications are a matter of wide public interest – not only amongst people having concerns about the technology but also amongst the millions of people who use mobile phones every day of their lives. As individuals we no doubt came to the table with a range of views, but we took particular care not to set ourselves up as health experts. Quite naturally though, we heard much in this connection and formed a high regard both for the people who expressed their concerns cogently and with great conviction and also for those whose analysis lent support to official positions on this vexed question. Rather, we took the view that our primary focus was to advise the City Council on what it should do in relation to its own land and property bearing in mind all that we had heard and the value of maximum influence. In this we take a united view as a committee and our report is before you.

My thanks must go firstly to my fellow Councillors on the Review Group. My task of chairing the group was made much easier by the fact that we worked so well together as a team, each benefiting from the others knowledge and interests. I would also like to express thanks to those who gave evidence to us - to the interest groups and their advisors who presented their cases with conviction and coherence; to the expert witnesses and agencies who gave generously of their time and expertise; and to the mobile operators and their representatives who generally responded well to our queries and requests.

Our thanks must also go to those officers who supported the committee. We were particularly helped by the Chairman of the Planning Committee, (Councillor David Roy), agreeing the involvement of two of his staff (John Culligan and Graham Mitchell) at all of our meetings. Azmat Mir from the Development Directorate also attended most of our meetings. And finally, the backbone of our review, was our immediate support team of Natalie Borman, Ajmal Hussain and John Cade (Scrutiny Office) and Phil Cooper (Committee Manager).



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At the heart of our review is the dilemma that most of us want to use a mobile phone either regularly or on occasion, but few of us would choose to have one of the consequential mobile phone masts located nearby. We trust that members of the Council will see our proposed resolution as realistic, practical and balanced; well founded, as we believe it to be, on a much tighter regime of regulation and verification.

Michael Wheeler



# 1 Summary

*"It's only a toy"*

(Gardiner Greene Hubbard, co-founder of the National Geographic Society upon seeing Alexander Bell's new fangled telephone in 1876).

*"Although it is interesting as an interesting novelty the telephone has no commercial application"*

(John Pierpoint Morgan, [1837-1913] to Alexander Graham Bell).

- 1.1.1 This toy with no commercial application now has, in its mobile form, some 60 million UK subscribers. Most people also regard their mobile phone as an indispensable part of their daily life. We cannot Canute – like (although most likely an historical misappropriation) turn the tide back. What, however, can be done is to ensure that there is a regulatory regime, both nationally and locally, which gives people the confidence to make informed choices and gives local authorities the power to represent the interests of their local communities.
- 1.1.2 This explosion in mobile phone use requires an ever increasing number of transmitters. There are currently some 45,000 base station sites in the UK. Of these base stations which are commonly called 'masts', two thirds are installed on existing buildings or structures (Mobile Operators Association MOA). Additional base stations will be required to support the third generation of mobile phones (3G); the MOA estimate that the number of base stations / masts will increase to 50,000 by 2007.
- 1.1.3 The increase in the use of mobile phone technology has been accompanied by concern in some sections of the community about the health risks from living, working or being educated in close proximity to a mast. Public fears have been accentuated by the lack of widely accepted scientific evidence about the safety of this type of telecommunications equipment. The issue is one which receives extensive coverage in the media and appears in political debate at both a local and national level.
- 1.1.4 Our Task and Finish Overview and Scrutiny Committee was initiated following the decision of the City Council to impose a moratorium on the siting of any further telecommunications equipment on its land and premises. The Overview and Scrutiny Committee was asked to examine prevailing evidence, taking advice from key players in this area and to make recommendations on a way forward.



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- 1.1.5 The Committee adopted a range of evidence gathering techniques to ensure that it had access to the most up to date information about mobile phone masts. These included receiving evidence from elected members, the public, scientific and medical experts, public interest groups, representatives from the mobile phone industry, the West Midlands Police and officers from the City Council's Legal, Planning and Property services. To identify best practice, literature searches were undertaken and contact made with several other Local Authorities.
- 1.1.6 Whilst we fully understand the argument that the banning of mobile phone masts on Council land and property sends out a powerful message that the City Council shares concerns about the lack of scientific evidence to rule out health fears, the reality is that mobile phones are an integral part now of most people's lives and are not going to be given up. We have, therefore, put more emphasis on maximising the City Council's limited influence on the current proliferation of masts and sites.
- 1.1.7 If the moratorium was maintained on our sites/buildings, leaving aside a possible legal challenge, this would simply result in the displacement of masts/sites to privately owned locations and public highways. This could well result in mobile phone masts/sites being located in even more unacceptable locations e.g. a mast on the top of a high rise building may be objected to by fewer people than a large number of scattered lower level masts.
- 1.1.8 Any lifting of the moratorium, however, must be complemented and accompanied by a much tighter regulatory regime. The City Council must not be a soft touch and in the interests of the well being of people who live and work in Birmingham, must make it clear that any proposal for a mast to be installed on council land and premises must be on the City Council's terms and not those of the operators. We were struck in the evidence that we took that a few Local Authorities have enforced a more regulated regime as opposed to the mobile phone operator self regulated regime. We consequently make recommendations for a much tougher regulatory regime.
- 1.1.9 What also emerged from the evidence-giving sessions, and in particular from the People's Panel telephone and focus group sessions, was that there was widespread concern at the lack of reasonably straightforward advice concerning the risks of mobile phones and mobile phone masts. Coupled with this was a view that the City Council – as a reasonably trusted body – had a role in helping to disseminate this information e.g. producing an information booklet.



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- 1.1.10 This goes some way to explain the “paradox”. There is no dispute that emissions from mobile phone handsets are much greater than from mobile phone masts. The common thread through all the advice from the Independent Expert Group on Mobile Phones is that care needs to be taken, particularly by children, on the intensity of use of a mobile phone; yet it is the mobile phone mast that gets all the focus of attention. A possible explanation for this is that most of us want to use mobile phones and choose to do so, whilst the location of mobile phone masts is something which is “done unto us”.
- 1.1.11 And then there is the influence of the Government which sets the framework particularly for planning. We believe the government can do much more here – for example, why is it that in Scotland and Northern Ireland full planning permission is required for all installations of transmitters, but not in England?
- 1.1.12 The Committee recognised that there are disparate strands to the debate on the whole issue of mobile phone technologies. The issue is complex and not aided by the terminology used; to assist with the reading of this report a glossary is attached as Appendix 1.





## 2 Summary of Recommendations

Recommendation	Responsibility	Completion Date
R1	That, in order to maximise the influence of the City Council over the location and distribution of mobile phone masts and base stations, the moratorium on the use of Council owned land and property be lifted from 1 November 2005 provided that the measures included in the accompanying recommendations (excepting R3 and R19) are put in place.	The Leader 1 November 2005
R2	That, before the lifting of the moratorium, the City Council puts in place a much tighter regulatory regime specified in more detail in subsequent recommendations.	The Leader October 2005
R3	That a further comprehensive review of the City Council's policy on the siting of telecommunications equipment on its land and premises be undertaken after three years.	The Leader 2008
R4	That roll-out plans are fully discussed with the City Council and that an advisory Member Forum is established for this purpose. This Member Forum also to have more general responsibility as an interface with mobile phone operators, to assess the operation of the new regulatory regime and to consider technical and research developments. The terms of reference of the Member Forum to be agreed with the Co-ordinating Overview and Scrutiny Committee.	Deputy Leader September 2005
R5	That all telecommunications sites which are granted approval should be "targeted sites" to ensure that the equipment installed is in accordance with that shown on the approved plans.	Chairman of the Planning Committee September 2005
R6	That independent checks are made to confirm that the actual installation of telecommunications equipment conforms to the original specification supplied.	Deputy Leader September 2005
R7	That independent audits are undertaken of emissions and publicised to ensure public confidence that base stations do not exceed the current ICNIRP or any future more comprehensive guidelines.	Deputy Leader September 2005
R8	That a charge to enable independent technical auditing of installations be included in site rental fees.	Deputy Leader October 2005



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R9	That to reinforce the mobile phone operators' commitment to mast and site sharing wherever this is desirable and practicable, the operators be required to demonstrate why they are taking the course of action that they are, and if it is not fully satisfied, the City Council consider refusing approval to the installation of a new mast.	Mobile Phone Operators Chairman of the Planning Committee	September 2005
R10	That a standard Lease Agreement is developed and made mandatory for all City Council Directorates. The Agreement must contain the flexibility to terminate the contract should the City Council consider at a scheduled review that research has shown adverse health effects.	Deputy Leader	September 2005
R11	That those lease agreements, with regard to telecommunications equipment on school sites, other educational establishments and social care facilities within the control of the Local Authority, must be made with the governing bodies / managers' prior agreement, following appropriate consultation and must provide them with the flexibility to have the contract terminated.	Deputy Leader	September 2005
R12	That when consent is sought from a school/educational establishment/social care facility for the installation of mobile telecommunications equipment they should be provided with adequate information to make an informed decision, including an explanation of the way in which emissions relate to the distance and direction away from the installation.	Deputy Leader	September 2005
R13	That at least 50% of the income derived from the siting of telecommunications equipment should be returned for the collective benefit of the tenants/residents/users of that facility and that the implementation of this provision is reviewed annually.	Deputy Leader	September 2005
R14	That the City Council produces an information booklet about mobile phone technologies, health concerns, siting, design and appearance. This to be made widely available through all the City Council's normal local outlets. This information also to be put on the City Council's website.	Deputy Leader	October 2005
R15	That a fully comprehensive and up-to-date register of mobile phone masts and base stations in the City is maintained and made available to the public, including a readily accessible electronic format and that its availability is publicised.	Chairman of Planning Committee	October 2005
R16	That Ward Members are consistently informed about the receipt of applications for mobile phone masts for their Wards and adjacent areas of neighbouring Wards, and are provided with an up to date picture of all mobile telecommunications apparatus known to be in the Ward on an annual basis.	Chairman of Planning Committee	July 2005



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R17	That directly through the Leader of the Council, via the City's MP's and through the Local Government Association, the Government be lobbied to give Local Authorities in England and Wales a stronger role in being able to regulate the installation of telecommunications equipment.	The Leader Local Government Association City MP's	September 2005
R18	That as in Scotland and Northern Ireland the Government is specifically asked that full planning permission be required for installations of all telecommunications equipment.	The Leader	September 2005
R19	Progress towards achievement of these recommendations should be reported to the Co-ordinating Overview and Scrutiny Committee in January 2006.  Subsequent progress reports will be scheduled by the Committee as necessary thereafter, until all recommendations are implemented.	Deputy Leader	January 2006



## 3 Terms of Reference

### 3.1 The Reasons for the Review

- 3.1.1 In response to increasing community concerns around the safety of mobile phone masts, the City Council at its meeting in February 2004 imposed a moratorium on the erection of new masts or upgrades to existing ones on council owned land and property.
- 3.1.2 Following the imposition of the moratorium, the co-ordinating overview and scrutiny committee was asked to research currently available information concerning mobile phone masts and to make recommendations on what an appropriate policy stance by the City Council should be.
- 3.1.3 The issue of telecommunication equipment or mobile phone masts as they are commonly referred to is one of high public interest. Concerns have been expressed at both a national and local level, with frequent coverage in the media. The existence of conflicting findings from research into links between health and masts has resulted in a perceived health risk by a significant number of people.

### 3.2 The Committee and its Terms of Reference

- 3.2.1 The terms of reference for the review were agreed by the Co-ordinating Overview and Scrutiny Committee in November 2004 and are attached as Appendix 2.
- 3.2.2 The review was carried out by the following group of Councillors:
- Councillor Michael Wilkes (Chair)
  - Councillor Susan Axford
  - Councillor Jan Drinkwater
  - Councillor Zoe Hopkins
  - Councillor Timothy Huxtable
  - Councillor Barbara Jackson
  - Councillor Sarah-Jayne Plant



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- Councillor Neville Summerfield

3.2.3 The officer team was lead by John Cade, with Natalie Borman and Ajmal Hussain acting as Lead Review Officers. Phil Cooper was our Committee Manager.

### 3.3 Methodology

3.3.1 The review group utilised a range of evidence-gathering techniques, including:

- Presentations from City Council Officers from Planning, Legal Services, Property Services and Finance.
- Elected Members were written to and asked to submit their views. A number of Members also gave oral evidence to the Committee.
- Discussions with representatives from the Mobile Phone Industry including the Mobile Operators Association, Orange, Vodafone, O2, T-Mobile, UK Broadband and 3.
- Presentations and written submissions from interest groups including SCRAM (Seriously concerned residents against masts), BRAM (Birmingham Residents against masts), a number of Neighbourhood Forums, Mast Sanity, Birmingham Association of Neighbourhood Forums (BANF), Mast Action, EM Radiation Research Trust, Sutton Coldfield Electro Sensitives (SCES), Friends of the Earth and Birmingham Chamber of Commerce.
- Public consultation meetings were held in the City, one in the North and one in the South.
- The People's Panel was used to test public knowledge about the issue of mobile phone masts. Two methods were used, a telephone survey and focus groups.
- On the issue of TETRA, oral evidence was invited from West Midlands Police, TETRAWATCH and O2 Airwave. West Midlands Police and TETRAWATCH gave oral evidence but O2 Airwave chose not to attend.
- Examining background information on best practice including other Local Authorities policies and the Office of the Deputy Prime Minister (ODPM) Code of Best Practice.
- Members and Officers undertook site visits to a school and two accommodation blocks, one of which was for older people. This also provided an opportunity to speak with the headteacher, governors and tenants to establish their views on the siting of telecommunications equipment on their buildings.



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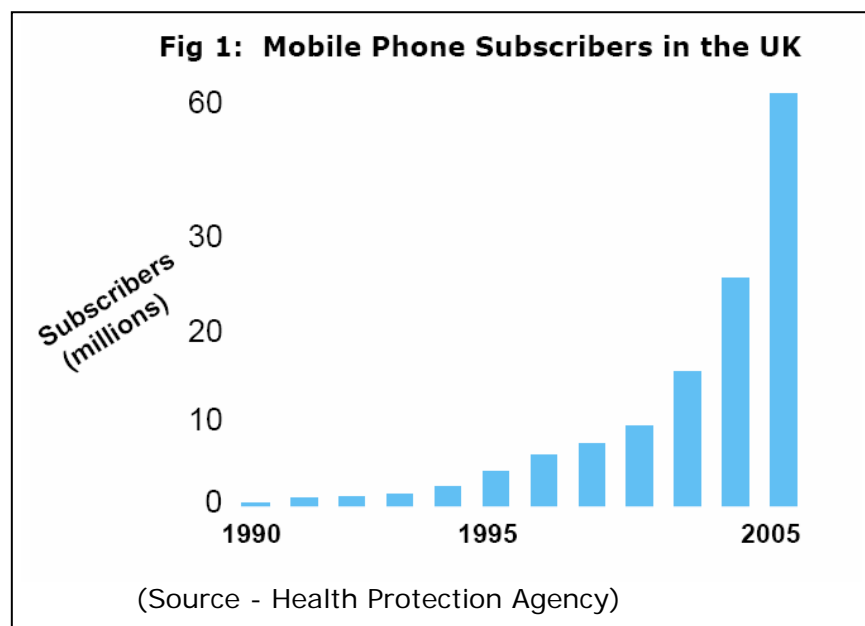
- Contact was established with OFCOM, the regulatory body for the telecommunications industry. OFCOM undertook an audit of the emissions from a mobile phone mast in the City.
- Expert testimony was provided by Dr John Stather and Dr Michael Clark (Health Protection Agency), Jammi Rao (Director of Public Health, North Birmingham PCT), Dr Gerard Hyland (Associate Fellow, University of Warwick), Dr John Walker (SCRAM) and John O'Brien (TETRAWATCH).
- Desk research was carried out to identify literature relating to telecommunications equipment; particularly about health and science.



## 4 Findings – The National Context

### 4.1 Explosion in the use of Mobile Phones in the UK

- 4.1.1 There are now some 60 million mobile phone subscribers in the UK; mobile phones have become part of our everyday life. Mobile phones are now regarded as an indispensable part of most people's lives. Walk from the Council house to Marks & Spencer's on any lunch time and you will see mobile phones glued to people's ears as if they were part of their anatomy. Their use also regularly penetrates the Council House itself with successive Lord Mayors feeling the need to introduce fines for not switching mobile phones off.
- 4.1.2 Mobile phones have been available since the mid 1980s, but are often thought of as a relatively new invention because of their recent high-profile consumer popularity. Early mobile phones were large, cumbersome and unreliable. However, the launch of 2G (second generation) and the fact that phones became smaller and more reliable, has led to a steady growth in their popularity. The explosion in growth in the number of UK mobile phone subscribers is illustrated in figure 1 below:





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- 4.1.3 The current technology for the operation of mobile phone masts is known as 2G or GSM, and the supporting structure for that is largely in place. The new generation of mobile communication systems is known as 3G and is creating a demand for more installations as different technology requires new networks, offering access to the internet and video viewing. Eventually, old masts will be replaced. In addition there is the digital communications network for the police, the terrestrial trunked radio system (TETRA) which also requires a mast infrastructure.
- 4.1.4 Additional technologies are being developed and used in the telecommunications field. 3G has already been noted but there is also Bluetooth, wireless local area networks (WLANs), ultra-wideband technology (UWB) and radio frequency identification devices (RFID)
- 4.1.5 With the introduction of third generation (3G) services in 2003 and the other new technologies mentioned, the UK's mobile phone user population is set to increase further. Information provided by the Mobile Operators Association (MOA) to the Committee stated that:
- "There are already around 60 million mobile phone users in the UK. Last year a record 75 million text messages were sent each day – 4.5 billion more text messages than was sent in 2003." (Stuart Eke, MOA)
- 4.1.6 The increase in the use of mobile phones and the introduction of 3G will lead to an increase in the number of base stations / masts. It is reported that 135,000 new mobile phone masts would be needed across the country, with 2000 of these in Birmingham.
- 4.1.7 A brief description of how mobile technology operates is detailed below.

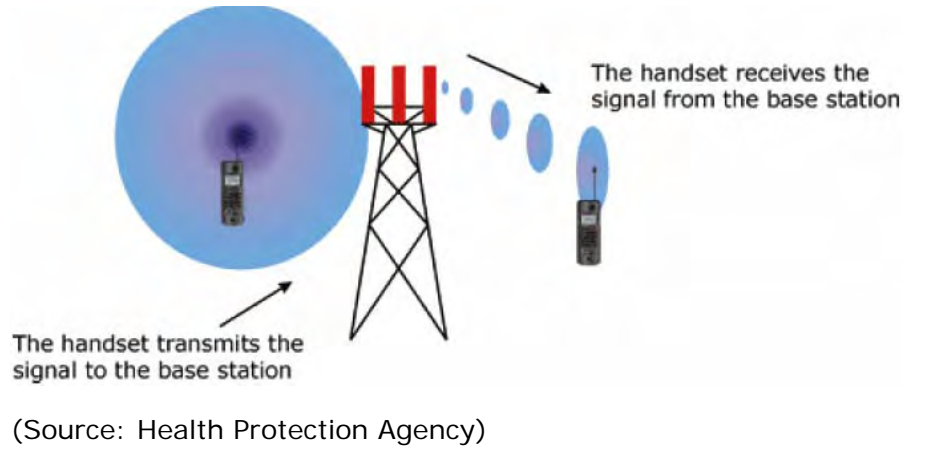
## 4.2 How Mobile Phones Work

- 4.2.1 The main difference between a standard telephone and a mobile telephone is that a standard telephone converts the sound waves of our voice into electrical signals which are sent along telephone lines, whilst a mobile phone converts the sound waves of our voice into radio waves which are transmitted through the air.
- 4.2.2 Mobile phones cannot work without base stations (commonly called "masts"). Base stations consist of a number of antennas that both transmit and receive signals from mobile phones. These antennas can be mounted on structures such as tall buildings, rooftops, lampposts, trees, flagpoles, church spires and housing tower blocks. After receiving the signal from a mobile phone, the base station then transmits a signal to a "switching centre", a telephone exchange for mobile phones. Here the call is "switched" either to another mobile phone or to the telephone network (see figure 2)





**Fig 2: Radio waves in mobile telephony**



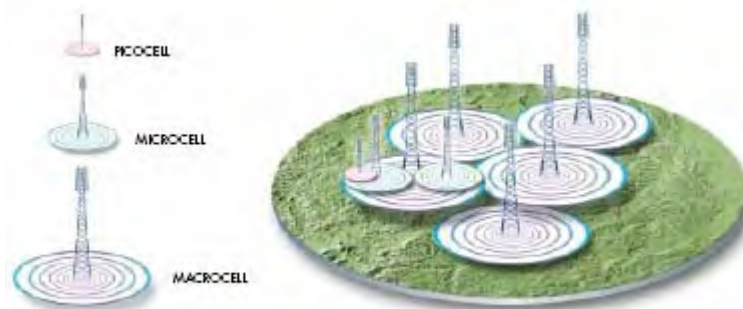
- 4.2.3 A mobile phone system requires a number of base stations. Each base station sits in the middle of a geographical area known as a 'cell'. The number of calls (or 'traffic') that a base station can handle at any one time is limited by engineering design constraints. In order to operate the mobile phone networks as efficiently as possible, base stations need to be located so as to maximise the number of calls that can be connected during peak use periods. Therefore the geographic size of the cell depends on the traffic during these periods. Cells in populated areas, with many mobile phone users will be smaller than cells in less populated areas. As the boundary of one cell is crossed, the cell next to it will automatically take over. The cells overlap to prevent holes in coverage.
- 4.2.4 There are three types of cells: macrocells, microcells and picocells (see figure 3).
- 4.2.5 A macrocell provides the main coverage in a mobile network. The antennas for macrocells are mounted on ground-based masts, rooftops and other existing structures. They must be positioned at a height that is not obstructed by surrounding buildings and terrain. Macrocell base stations have a typical power output of tens of watts.
- 4.2.6 Microcells provide infill radio coverage and additional capacity where there are high numbers of users within macrocells. The antennas for microcells are mounted at street level, typically on the external walls of existing structures, lamp posts and other street furniture. The antennas are smaller than macrocell antennas and when mounted on existing structures, can often be disguised as building features. Typically, microcells provide radio coverage across smaller distances and are placed 300m-1000m apart. They have lower outputs than macrocells, usually a few watts.



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- 4.2.7 A picocell provides more localised coverage than a microcell. They are normally found inside buildings where coverage is poor or where there are a high number of users, such as airport terminals, train stations or shopping centres.

**Fig 3: diagram showing cells and base stations.**



(Source: Code of Best Practice on Mobile Phone Development)

- 4.2.8 The MOA state that in the UK "base stations are usually built 200-500m apart in towns and 2-5km apart in rural areas. The size of a cell also depends on the local terrain. Radio signals can be blocked by trees, buildings, hills and valleys so base stations may have to be closer together... large outdoor masts can handle about 100 to 150 simultaneous calls, while a small base station typically inside a building carries about 30. In an area where call traffic is high additional base stations may have to be built to provide effective customer service." (MOA March 2004).

### 4.3 The Technology

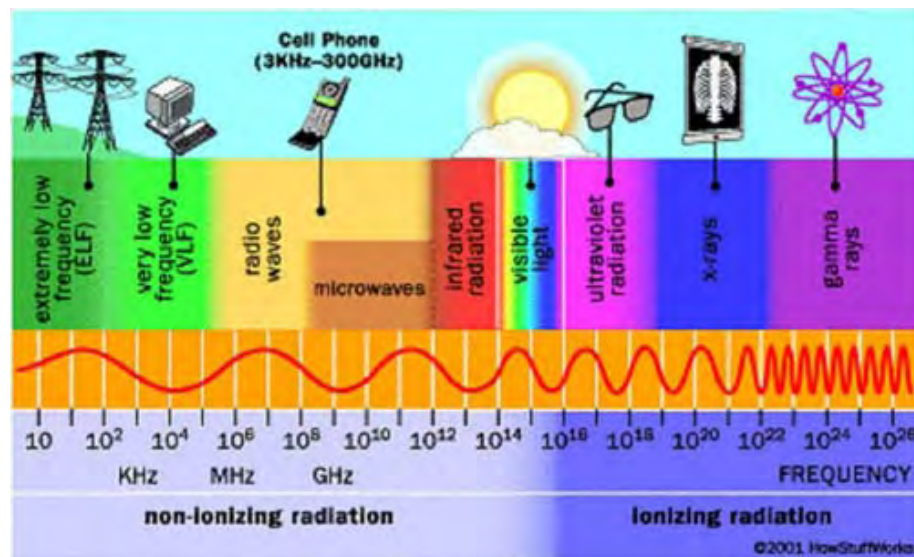
- 4.3.1 Concerns exist within the public about the possible impact of mobile phone technologies on health and well-being. These concerns relate to the fact that both mobile phones and base stations emit radiofrequency (RF) radiation (See Figure 4). People are exposed to different types of radiation that exist in the natural environment. These include both ionising and non-ionising radiations.



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- 4.3.2 Ionising radiations include x-rays, gamma rays, alpha and beta particles and neutrons. When ionising radiation passes through cellular tissue it produces charged water molecules. These can break up into entities called free radicals which are highly reactive chemically and can alter important molecules in the cell, including DNA. High levels of exposure to ionising radiation can kill cells but low doses can cause damage to DNA in a way that can ultimately go on to cause cancer or other long term health effects.

Fig: 4 Electromagnetic spectrum



(Source: www.vodafone.com )

- 4.3.3 Non-ionising radiations include electromagnetic fields and radiations (EMFs) as well as optical radiations. EMFs arise from a variety of sources including the generation and use of electricity and mobile phone technology which gives rise to radiofrequencies. In contrast to ionising radiation, experimental studies have not demonstrated that EMFs can damage DNA directly and in doing so cause mutations in genes or chromosomes. They thus cannot initiate cancer in the way that ionising radiations can. There remains some possibility that they could promote the cancer process by affecting cellular changes in a manner not yet understood. Research continues to examine this possibility.
- 4.3.4 When these matters were discussed with a focus group of Birmingham residents, there was a pretty good understanding of how radiation can be both a force for good and harm. When, however, this was related to the use of everyday appliances and other lifestyle habits (e.g. sunbathing) there was much confusion (see full report at appendix 3)



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- 4.3.5 The prevailing view in the scientific community is that exposure to RF radiation below ICNIRP guidelines does not cause adverse health effects to the general population. However, there is some scientific evidence which suggests there may be biological effects occurring at exposures below these guidelines. Biological effects do not however necessarily result in health effects. For example the impact of daylight on the retina is a biological effect which allows us to see. In the course of the review we heard from a number of people who reported they had electrical hypersensitivity (EHS) and were at pains to stress that their illnesses were not psychosomatic but were very real.
- 4.3.6 O2 Airwave is the new mobile radio system for the police service in England, Wales and Scotland. It is based on TETRA (TErrestrial TRunked RAdio) technology, a European standard that was agreed in the early 1990's by the European Telecommunications Standards Institute. TETRA technology (or similar technology) has been adopted by emergency services in countries around the world because of its resilience and the high security it provides.
- 4.3.7 It is these very gaps in knowledge which led the government to set up the Independent Expert Group on Mobile Phones (IEGMP) and which led that body to suggest a precautionary approach to the use of mobile phone technologies until much more detailed and scientifically robust information on any health effects becomes available. The report of the IEGMP on Mobile Phones and Health (2000), also known as the Stewart Report, plays a vital part in a number of considerations around this subject matter and that is why we consider this in more depth later in this report.
- 4.3.8 Despite no clear scientific evidence of harm and indeed most scientists claiming there is no risk at all, concern continues to be expressed. Indeed, the focus group undertaken by this committee showed most people's views on the risks associated with mobile phones were determined by what people read in the press. The next section picks up on these issues.

### 4.4 Expressions of Public Concern

- 4.4.1 Despite the explosion in the use of mobile phones there is considerable public anxiety around mobile phone masts.
- 4.4.2 The concerns can be broadly divided into three categories:
- Concerns about health and safety issues particularly associated with mobile phone masts
  - Concerns about visual amenity, sound, vibration pollution, loss of value to properties etc
  - Concerns about the way planning applications can be dealt with and public consultation.



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- 4.4.3 Public fears are heightened by media coverage of this issue; as Figure 5 below illustrates headlines in the local and national press raise the public's anxieties.
- 4.4.4 There can be no doubting that mobile phone masts are treated by many tabloid newspapers as a bugaboo.

**Fig 5: Examples of press headlines**



## 4.5 The Paradox

- 4.5.1 There is common agreement both from the promoters of the development of the mobile phone industry and pressure groups opposing the proliferation of masts that RF emissions from a handset, which of course is placed directly against the head, compared with a mobile phone mast, which will invariably be a short distance away, is much greater.
- 4.5.2 Professor Challis (Vice Chairman of the IEGMP) uses the comparator that emissions from one hour use of a mobile phone is equivalent to one year's emissions from a mobile phone base station. Yet despite this, there remains much more public concern about mobile phone masts than mobile phones.
- 4.5.3 A possible explanation for this is that most of us want to use mobile phones and it is of course something we choose to do, as opposed to the location of a mobile phone mast, which is "done unto us".



## 5 Findings - City Council Current Practice

- 5.1.1 In response to the expressed concerns, the City Council introduced a moratorium in February 2004 to enable the prevailing evidence to be examined. This means no new telecommunications equipment has been installed or upgrades allowed to existing equipment on council owned land and property for the last 17 months.
- 5.1.2 At present the Council has no overall policy framework to govern the siting of telecommunications equipment on its land and premises. Strategic Directorates have used their discretion in allowing equipment on land and premises under their control.
- 5.1.3 The City Council currently has lease agreements on 134 sites that are distributed throughout the City, the majority being on housing tower blocks. There are also a number of installations on school and Council leisure sites. The distribution by the Strategic Directorates is listed below:
- |                      |     |
|----------------------|-----|
| Housing              | 112 |
| Resources            | 11  |
| Learning and Culture | 11  |
- 5.1.4 The Council does not allow subletting of its sites to other operators under the terms of its existing leases, however where space is available it has allowed more than one operator to lease space for its installations. There are 13 such shared agreements in place at present.
- 5.1.5 The sale of the 3G spectrum licences by the Government and the terms of the licence are driving the move to 3G operations as quickly as possible. This will generate the need for additional sites to “infill” the lack of coverage as the cell sizes for 3G networks are smaller than for 2G, resulting in more base stations being required to cover the same area. Wherever possible, operators do seek to upgrade their existing base stations or share sites used by other operators, but the Council will inevitably be faced with requests for more sites.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

### Financial Information

- 5.1.6 There are 81 rent reviews that are due up to 31 December 2006. We must ensure that for any future rent reviews the City Council achieves the maximum return for the benefit of its citizens.
- 5.1.7 The existing lease agreements are generally for periods between 10 to 15 years, with 39 agreements due to expire by December 2006. All the other agreements will expire by 2020.
- 5.1.8 No lease renewals were instigated in 2004/05 due to the moratorium being in place. It is to be noted however, that approximately 75% of the leases are historically NOT excluded from the Landlord and Tenant Act 1954. The companies will therefore have an automatic right to renew for a further period unless the Council could establish one of the Statutory Grounds of Opposition, which would be unlikely.
- 5.1.9 The Landlord and Tenant Act 1954 allows the tenant automatic right to renewal of a lease unless one of the following grounds of opposition apply:
1. Disrepair - where the property is in such a poor state that a new lease should not be allowed. (Where tenant is responsible for repairs under the terms of the lease)
  2. Persistent delay in paying the rent - and this must be "persistent"
  3. Other breaches of the lease terms - breach of the lease covenants such as planning legislation and statute.
  4. Uneconomic Subletting - where carrying out a marriage value of 2 demised premises would create a better value OR where a tenant is subletting below market value and this would be used at the head-lessee's rent review.
  5. Alternative Accommodation - alternative premises provided for the tenants use, this must meet the tenants existing goodwill, lease terms and business needs
  6. Reconstruction/demolition - Where the premises are required for redevelopment, we must show intent with planning permission and finance.
  7. Landlords own occupation - where the landlord wants to occupy for his own business - intention must be proven again.
- 5.1.10 Because the majority of current leases were negotiated over ten years ago, when there were few concerns about such equipment, and the length of lease was agreed with the individual client departments, taking into account the particular circumstances at the time, it was not considered reasonable to exclude these leases from the Landlord and Tenant Act 1954. The majority of leases therefore have the automatic right to renewal. Leases negotiated recently are exempted from the Landlord and Tenant Act 1954 so as to safeguard against an automatic right to renewal.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

- 5.1.11 Whilst the moratorium has given concern to the mobile phone industry, they have generally accepted the need for the City Council to develop a policy stance on this matter. This will provide some certainty to them in the way they approach and deal with the City Council. Similarly the operators recognise the City Council has a responsibility to recognise the concerns expressed from within the community. However, they have continued to point out that the longer the moratorium continues, the greater the problem becomes in ensuring adequate coverage.
- 5.1.12 A key part of this review has been to establish the position of key players and the next section of this report deals with these matters.





## 6 Findings - The Key Players

- 6.1.1 Given the complexity of the mobile phone mast debate, there are a considerable number of interested organisations. This section outlines the roles, standpoints and key issues for each of the key players: Government, Health Protection Agency (HPA), Local Planning Authority (LPA), Mobile Phone Operators and the Mobile Operators Association (MOA), Pressure Groups opposed to mobile phone masts, the business community and OFCOM.
- 6.1.2 It is necessary to understand the role each play, their respective interest and what influence they actually have.

### 6.2 Government

- 6.2.1 The Government has given strong encouragement to the development of mobile phone technology. In April 2000 the Government raised £22.47bn from the third generation (3G) mobile spectrum licence auction. It was described as the "biggest ever" auction. This made for a very competitive mobile phone market place and demonstrated how lucrative the mobile phone industry is in the UK. Indeed it is a commonly held view that the UK telecommunications industry is the most successful in Europe, and that the swift introduction of the third generation of mobile phones will be the key to maintaining the UK's 'competitive edge'.
- 6.2.2 The Office of the Deputy Prime Minister (ODPM) is the Government department responsible for legislation on telecommunications development. Powers to run telecommunication systems are granted under the Telecommunications Act 1984, and the right to erect telecommunication installations is conferred upon the operators under the Electronic Communications Act 2003.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

- 6.2.3 In November 2002, ODPM published "The Code of Best Practice on Mobile Phone Network Development". The Code was produced jointly by representatives of central and local government and the mobile phone industry. It builds on the Government guidance in Planning Policy Guidance Note 8 (revised) (PPG8) (see 4.11) and operators' "ten commitments to best siting practice" (see 4.7.5). It was envisaged that this publication would promote standardised practice, greater consistency of approach and aid the transparency of the process of siting of telecommunications development, for all concerned. All the mobile phone operators became signatories of the Code. The evidence we received however, suggested there was an enormous variation in practices in the operators' approaches to implementation of the Code of Best Practice.
- 6.2.4 The five mobile phone operators, having purchased licences from Government, are under certain obligations with regard the development of their networks. One such obligation is to have 3G coverage to 80 per cent of the population by the end of 2007. This has resulted in an increase in the number of base stations, particularly within urban areas where population density is greater.
- 6.2.5 The ODPM has recently commissioned research into the operation of the Code of Best Practice on Mobile Phone Network Development, particularly the twin aspects of how Local Planning Authorities have operated the guidance and the public perception of the effectiveness of the Code. This is being undertaken by Reading University who have surveyed a number of local authorities and public pressure groups to test the efficacy of the Code. We know that the report is expected to recommend changes that would facilitate better community consultation.
- 6.2.6 At the same time, Government has also recognised a need to respond to public concerns. It took the initiative of setting up the Independent Group on Mobile Phones (IEGMP) in 1999 which resulted in the Stewart Report published in 2000 and also commissioned and supported research in other areas.
- 6.2.7 The Stewart Report noted the lack of detailed health research in this area and one of its key recommendations was for a programme of research supported by Government and industry. The Mobile Telecommunications Health Research programme (MTHR) was launched in 2001 (see 4.10.1). In 2004, the National Radiological Protection Board (NRPB) produced a report entitled "Mobile Phones and Health" for Government, which provided further advice to address remaining public concerns about mobile phone technology as well as related technological developments. It also reviewed progress on implementing the recommendations of the Stewart Report.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

- 6.2.8 The Department of Health has also produced a number of leaflets giving official advice about mobile phones, base stations and health.

**Fig 6: Example of Department of Health leaflets on mobile phones and base stations**



### 6.3 Health Protection Agency (HPA)

- 6.3.1 In April 2005, The National Radiological Protection Board (NRPB) became part of the new Health Protection Agency under the Health Protection Act 2004.
- 6.3.2 The NRPB was set up by the Radiological Protection Act 1970 to advise Government and those with responsibilities for radiological protection. For certain topics of concern, the NRPB has set up independent advisory groups to assess various risks. There are Advisory Groups for Ionising Radiation, for Non-Ionising Radiation and for Radiation, Risk and Society. The Stewart Committee was a special one-off Advisory Committee which reported to Government via the Chairman of NRPB.
- 6.3.3 Because of the importance of the Stewart Committee and its follow up report in 2004, and generally the authority it holds, a section is dedicated to this in its own right (see section 8).



## 6.4 Local Planning Authority (LPA)

- 6.4.1 We were very well supported in our deliberations by officers from the Planning Division. The Chairman of the Planning Committee, Councillor David Roy also very helpfully outlined the role of the Planning Committee and, within the limitations imposed upon it by the current national planning legislation, the very serious manner in which they considered all siting applications.
- 6.4.2 We found that there was already a reasonable understanding about some of the limitations a Local Planning Authority has in controlling the development of telecommunications equipment. However, this did not extend to what can and cannot be done around specific proposed installations. Because this is crucial to how the proliferation of telecommunications sites can/cannot be controlled, we have deliberately gone into this matter in some detail.

### Planning Regulations

- 6.4.3 It is not always the case that telecommunications equipment requires an application for full planning permission. This is because certain categories of telecommunications equipment either do not constitute 'development', or they benefit from 'permitted development' rights (contained in the Town and Country Planning (General Permitted Development) Order 1995), and are in some cases subject to prior approval and compliance with limitations/restrictions.
- 6.4.4 Generally speaking, the relevant planning regulations identify four categories (the types of equipment that fall into each category are set out in more detail below):
- (1) Telecommunications equipment which is 'de minimis' (non-development) and therefore does not constitute 'development';
  - (2) Telecommunications development which is permitted development but is not of a size or number requiring either a full planning application or prior approval application;
  - (3) Telecommunications development which is permitted development but subject to prior approval of the Local Planning Authority in respect of siting and appearance; and
  - (4) Telecommunications equipment requiring an application for full planning permission.
- 6.4.5 Government guidance on telecommunications is contained in Planning Policy Guidance Note 8 (PPG8). The issue of health concerns is dealt with in paragraphs 97 and 98 of the PPG8.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

- 6.4.6 The guidance in PPG8 has been reiterated in a recent case involving Harrogate Council, in which the Court of Appeal confirmed that the guidance could only be departed from if there were “exceptional circumstances”, and clear reasons could be given for so departing. Therefore, in cases where a telecommunication operator has submitted a certificate of compliance with the ICNIRP guidelines, it will not be for the Local Planning Authority (LPA) to consider further the issue of health concerns, unless it can provide clear reasons to demonstrate that exceptional circumstances exist.

### The Four Categories

- 6.4.7 **(1) Telecommunications equipment which is de minimis and therefore does not constitute development.**

- This can include very small antennae or boxes similar in size to alarm boxes on front of buildings and below 50 cm in length. However, a telecommunications company still has to serve a 14-day letter of notification on the Local Planning Authority.
- No requirement for public consultation.

- 6.4.8 **(2) Telecommunications development which is permitted development but is not of a size or number requiring either a full planning application or prior approval application.**

Notification (one calendar month) is required to inform the Local Planning Authority of their proposal to install equipment (Communications Regulations 2003)

- This category includes smaller equipment such as antennae up to 4 metres in height on top of buildings, dishes and antennae systems subject to a maximum criteria dependent on the size or height of the building and cabins under 2.5 cubic meters (cu.m). For a building up to 15 m (5 storeys) high, only two separate licensed operators are allowed without full planning permission. For higher buildings, three operators are permitted subject to maximum height and size criteria.
- Development has to be sited so as to minimise its effect on the external appearance of the building and removed when no longer required for operational purposes.
- No public consultation requirement.

- 6.4.9 **(3) Telecommunications development which is permitted development but subject to prior approval of the Local Planning Authority in respect of siting and appearance**

The local planning authority has 56 days to make a decision (including a statutory public consultation), otherwise development can proceed. This category includes:

- Masts up to 15 m in height (except those on a building less than 15 m in height within 20 m of the highway – see below).
- Radio cabins in excess of 2.5 cu.m (except those which exceed 30 cu.m on buildings or 90 cu.m on ground or are located in



## Siting of Telecommunications Equipment on Council Owned Land and Premises

Conservation Areas – see below.

- Antennae which exceed the height of the building by 4 m or more (subject to height limits mentioned in section 4 below).
- Development ancillary to radio equipment housing, e.g. access roads, fencing, ladders.
- Telephone call boxes.
- For development near to or on schools and educational establishments there is a requirement to consult those bodies (as for full planning applications).

### 6.4.10 (4) Telecommunications equipment subject to full planning permission

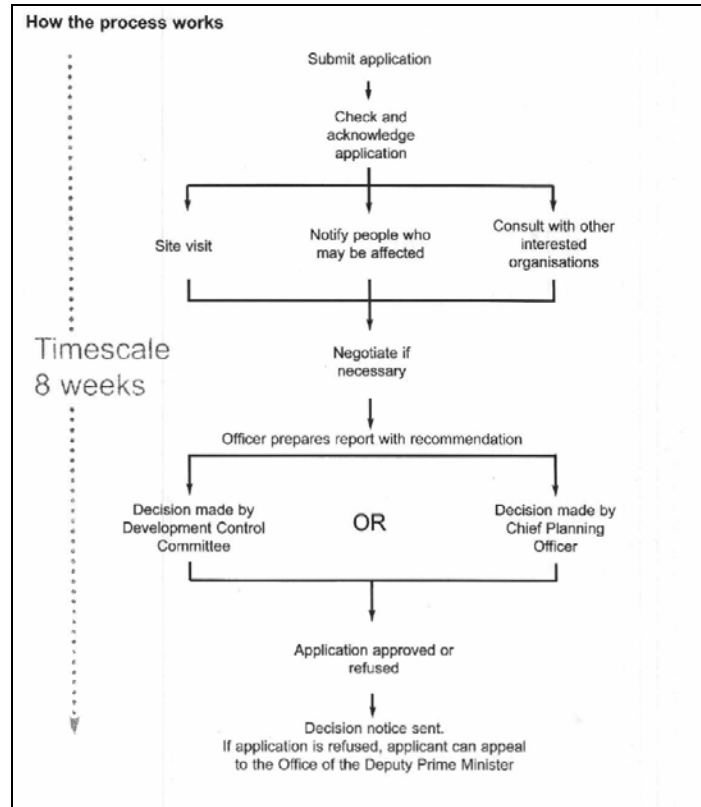
There is a statutory requirement for public consultation and PPG8 requires applicants to consult schools and colleges for development located close to or on these premises. This category includes:

- Masts over 15 m in height and masts (for driver information systems) on a building under 15 m and within 20 m of a highway.
- Radio cabins exceeding 2.5 cu.m in a Conservation Area of SSSI, exceeding 30 cu.m on a building or exceeding 90 cu.m on the ground.
- Situations where permitted development rights are exceeded for example on top of a building which is more than 10 m above the roof of a 30 m high building. Also where there are more than three antennae systems or operators on top of a 30 m high building.
- Development on listed buildings or scheduled monuments.
- Telecommunications antennae (which are not small antennae not exceeding 50 cm in length or those on a dwelling house) located within a Conservation Area or SSSI.
- Antennae located on a building less than 15 m in height when located on a wall or roof slope facing a highway which is within 20 m of the building.

Figure 7 below illustrates the full planning process.



Fig 7: How the planning process works



### Rights of Appeal

- 6.4.11 With regard to Planning Applications and Prior Approval Notifications, if refused the applicant has a statutory right of appeal to the Planning Inspectorate.
- 6.4.12 In the evidence we received we were told by planners that they were very mindful that if the planning committee departed from central government guidelines, the risk of the decision being overturned was high and that would bring with it large costs. However, others including TETRAWATCH asserted that these risks have been overstated and that where the LPA decision has been overturned, this has not resulted in awards of large costs.
- 6.4.13 It is clear that Local Authorities have to form a balanced judgement including weighing up the risks involved in facing a possible appeal and the consequences of an adverse outcome. A number of contributors however said they believed the City Council should be more prepared to take that risk in the interests of Birmingham.



### Planning Guidelines for Telecommunications Applications

- 6.4.14 There is a fair degree of shepherding about what we can do, as an LPA our hands are tied. LPA's draw upon various policies to assist in determining applications whether for prior approval or planning permission. These include:
1. Government Planning Policy Guidance No. 8 Telecommunications (2001) – PPG8
  2. Unitary Development Plan Draft Alterations 2001 Telecommunications, paragraph 8.55 as amended by Cabinet February 2005, and Supplementary Planning Guidance.
  3. Code of Best Practice on Mobile Phone Network Development (joint publication by Government, industry and local authorities)
  4. Other material considerations include siting and design of proposals, merits of alternative sites and public consultation comments, impact on the visual amenity of the locality, planning case law and appeal decisions.
- 6.4.15 While mobile phone companies proposing to position a base station / mast / pole on the public highway or verge are not exempt from the planning regulations, from the point of view of the Highway Authority they are treated as statutory undertakers and the City Council cannot refuse the development but can suggest siting changes to avoid creating hazards to highway / pedestrian users and to comply with council guidelines in this respect. The City Council should always be consulted on planning applications and prior approval notices for street based telecoms.
- 6.4.16 Health considerations and public concern can in principle be material considerations in determining applications for planning permission and prior approval. Whether such matters are material in a particular case is ultimately a matter for the courts. It is for the decision-maker (usually the Local Planning Authority) to determine what weight to attach to such considerations in any particular case. However, it is the Government's view that the planning system is not the place for determining health safeguards. It remains central Government's responsibility to decide what measures are necessary to protect public health. In the Government's view, if a proposed mobile phone base station meets the ICNIRP guidelines for public exposure it should not be necessary for a local planning authority, in processing an application for planning permission or prior approval, to consider further the health aspects and concerns about them." (PPG8)
- 6.4.17 The Government is coming under renewed pressure to widen the PPG8 planning regime. Various local Authorities are lobbying, through the Local Government Association, for planning authorities to be awarded more discretion in determining applications for telecommunications installations along with the removal of permitted development rights. We regard it as essential that the City Council is to the fore in these representations.





## Siting of Telecommunications Equipment on Council Owned Land and Premises

- 6.4.18 The All Party Parliamentary Mobile Phone Group in July 2004, made a series of recommendations toward revising the PPG8 guidelines to allow communities more consultation in pre-rollout decisions.
- 6.4.19 In our desk research we found that Manchester City Council had developed a consultation protocol for use on every occasion an approach is made by an operator to site equipment on the City Council's land or premises. This is a prescriptive document outlining the different stages a consultation is expected to pass through. We found that some of this protocol is already practice in Birmingham. What sets it apart is the emphasis that it places on pre-application discussions and the obligation it puts on operators to include details of the area of coverage expected from the proposed installation. It also calls for pre and post installation monitoring of emissions and contains a clause requiring "reassurance monitoring" to be carried out around the site on a yearly basis with associated costs being met by the operator. The affect of the recommendations proposed by this report will produce a comprehensive tighter regulatory regime.
- 6.4.20 The value of the Manchester protocol is very much in its setting out clearly the Council's expectations in terms of consultation at specified stages. However, it could be improved by including protocols for assessing that telecommunications equipment, once installed, are as according to the agreed specifications and by prescribing a rigorous process for consultation with educational establishments that defines the parties to be consulted and timeframes.
- 6.4.21 We learnt that in Scotland there are less permitted development rights for operators seeking to install new equipment. Since 2001, in Scotland it has been a requirement that all new mobile phone masts regardless of size are to be subject to full planning permissions. There are also requirements for LPAs to be notified each time a new antenna is installed, even upon existing masts. Similarly in Northern Ireland, there are less permitted development rights there.

## 6.5 Mobile Phone Operators and Mobile Operators Association (MOA)

- 6.5.1 Five mobile phone operators in the UK are licensed to deliver the networks - Orange, Vodafone, 3, T-Mobile, and O2 and they are represented by the Mobile Operators Association (MOA). A sixth operator, O2 Airwave Service, delivers the TETRA network.
- 6.5.2 The MOA represent the five UK mobile phone operators, acting as an interface with interested parties such as local planners, elected councillors, resident groups, amenity bodies and the public - and represent the operators in public debate on relevant issues, both in the media and in policy circles.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

- 6.5.3 We invited evidence from the MOA in this capacity. Stuart Eke (Public Relations Executive) attended to give evidence and was supported by representatives of each of the operators. We discussed the MOA's relationship with local authorities, in particular with the planning function. Stuart Eke advised us that key elements of this were: an annual roll out plan meeting to notify local authorities about each operator's network development plans for the forthcoming year; making available a 'mast register' to help promote mast and site share solutions ;engaging in pre-application discussions; consulting with local communities through elected members. Unfortunately, practice did not always bear out what we were told.
- 6.5.4 Stuart Eke expressed a keenness on behalf of the operators to work with local authorities in developing their networks and recognised the importance of Birmingham as a big conurbation and thriving business destination. The MOA suggested that council owned land and premises were most often the first choice for operators when locating sites for new equipment. Local Authority land, it was suggested, is better suited to telecommunication needs and the breadth of the portfolio of potential sites, increases the likelihood of achieving a balance between environmental impact, technical requirements and community expectation. Stuart Eke suggested that high rise tower blocks were particularly suitable for siting of equipment.
- 6.5.5 The MOA has produced a number of documents to encourage best practice in siting decisions. One is "Working with the Local Community" and "Ten Best Practice Commitments", used as a voluntary code to help the operators address concerns relating to the development of base stations (see figure 8).



**Fig 8: Ten Commitments to Best Siting Practice (Source MOA)**

1	<p><b>IMPROVED CONSULTATIONS WITH COMMUNITIES</b></p> <p>Develop, with other stakeholders, clear standards and procedures to deliver significantly improved consultation with local communities.</p>
2	<p><b>DETAILED CONSULTATION WITH PLANNERS</b></p> <p>Participate in obligatory pre-rollout and pre-application consultation with local planning authorities.</p>
3	<p><b>SITE SHARING</b></p> <p>Publish clear, transparent and accountable criteria and cross-industry agreement on site sharing, against which progress will be published regularly.</p>
4	<p><b>WORKSHOPS FOR COUNCILS</b></p> <p>Establish professional development workshops on technological developments within telecommunications for local authority officers and elected members.</p>
5	<p><b>DATABASE OF BASE STATION SITES</b></p> <p>Deliver, with the Government, a database of information available to the public on radio base stations.</p>
6	<p><b>COMPLIANCE WITH ICNIRP PUBLIC EXPOSURE LEVELS GUIDANCE</b></p> <p>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 (IEGMP).</p>
7	<p><b>ICNIRP CERTIFICATION</b></p> <p>Provide, as part of planning applications for radio base stations, a certification of compliance with ICNIRP public exposure guidelines.</p>
8	<p><b>PROMPT RESPONSES TO ENQUIRIES</b></p> <p>Provide specific staff resources to respond to complaints and enquiries about radio base stations, within ten working days.</p>
9	<p><b>SUPPORT RESEARCH INTO HEALTH AND MOBILE PHONES</b></p> <p>Begin financially supporting the Government's independent scientific research programme on mobile communications health issues.</p>
10	<p><b>STANDARD DOCUMENTATION FOR PLANNING SUBMISSIONS</b></p> <p>Develop standard supporting documentation for all planning submissions whether for full planning or prior approval.</p>



### The Ten Commitments

- 6.5.6 Launched in 2001, the aim of the Ten Commitments was to help ensure transparency in building mobile phone networks, to provide more information to the public and local planners and to help increase the involvement of the public in decisions regarding the siting of base stations.
- 6.5.7 The first of these commitments is about improved consultation with communities and refers specifically to “develop, with other stakeholders, clear standards and procedures to deliver significantly improved consultation with local communities”. We have to say that we saw little evidence of a pro-active approach being taken by operators here. Consultation with the City Council seemed to be varied and little effort seems to have been made in engaging with “other stakeholders”.

### Traffic Light Rating Model (TLM)

- 6.5.8 In addition, the operators have developed their own Traffic Light Rating Model (TLM) intended to assist operators and their agents in determining the level of consultation that should be carried out when positioning a mast. The model works on a graph principle, taking into consideration planning and environmental as well as community issues. Each of these sets of issues are broken down into measurable items, which are then scored using provided checklists. The scores for each set are totalled. Running each of the scores against the relevant axis will result in the sites circumstances being rated by the operators as Green (least sensitive) Amber or Red (most sensitive). The rating allocated to the potential site is then used to determine the level of consultation.
- 6.5.9 The value and credibility of this was challenged by a number of contributors who felt that local residents and councillors were better placed to assess community implications. This needs to start with the roll out plans where early community feedback could help a more balanced determination.
- 6.5.10 Two reviews have been conducted by Deloitte (July 2003 and January 2005) to assess the operators’ performance against the aims behind the Ten Commitments and the TLM. These found that the operators “...*have continued to make demonstrable progress in the implementation of the Ten Commitments*”. However there were recommendations against a number of the commitments e.g. increased flexibility in working with local communities; providing clearer explanations for proceeding with alternative and/or suggested sites; giving consideration to increased and new use of communication channels with local communities.



## 6.6 Pressure Groups Opposing Mobile Phone Masts

6.6.1 Across the country a number of public interest groups have emerged, concerned about the potential health risks and visual intrusion emanating from mobile phone masts. The Committee received evidence from the following groups

- Seriously Concerned Residents Against Masts (S-C-R-A-M) (formerly Sutton Coldfield Residents Against Masts)
- Mast Sanity
- Mast Action
- Birmingham Association of Neighbourhood Forums (BANF)
- Whitehouse Common and District Neighbourhood Forum
- Sutton Coldfield Association of Neighbourhood Forums (SCANF)
- Friends of the Earth Birmingham
- Sutton Coldfield Electrosensitives

All of these organisations were invited to provide written evidence and S-C-R-A-M was invited to give oral evidence. We are also attaching within the Appendix (Appendix 4) written evidence that they provided and include in the background sources to this report the web addresses for the pressure groups.

6.6.2 There are a number of particularly active pressure groups within the Birmingham area. The Seriously Concerned Residents Against Masts (S-C-R-A-M) has received a particular national profile both because of the collapse of the Wishaw mast and the involvement of the Chair, Eileen O'Connor on the ITV programme "It's Your Vote" where she had a single campaigning issue of masts. Perhaps because of this national profile the group has renamed itself Seriously Concerned Residents Against Masts. The Committee received a considerable amount of evidence from S-C-R-A-M. We seek to capture below the main elements of their submission:

- Health risks have been understated by Government reports and individual experts. Illnesses are not psychosomatic but are real problems. They provided information on apparent cancer clusters around particular mobile phone masts sites; relating these to the beam of greatest intensity. In addition, people identified themselves as being sensitive to electromagnetic fields or harmful effects that they have upon them.
- Whilst it is recognised that mobile phones are not going to go away, they believed that the technology should be sufficient to allow masts to be sited at least 400 – 500 metres away from residential properties, schools and hospitals. Eileen O'Connor referred to studies that supported their views on the safe siting of masts.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

- The City Council needed to be aware of the potential of legal challenge if in their capacity as landlord they allowed masts on their land and it was proven that there are negative health affects from them.

6.6.3 The Committee also heard from Dr Gerard Hyland an independent scientist. Dr Hyland provided a presentation about the how exposure to mobile phone base station signals could adversely affect humans. Below we attempt to capture the key messages from his evidence:

- Current Government policy such as PPG8 is based solely on compliance with the safety guidelines published by the International Commission for Non-ionising Radiation Protection (ICNIRP). The ICNIRP guidelines only ensure that exposure does not result in an adverse degree of body heating; they do not take into account non-thermal influences.
- Often reports of ill health are not taken seriously by the 'establishment' as they are dismissed as psychosomatic or consideration of non-thermal influences are not taken into account.
- It is often claimed that the safest place to site mobile phone antenna is on the roof of a school, but Dr Hyland stated that this would be true but for the existence of side-lobe emissions that may penetrate the roof.
- Concern was expressed about the impartiality and scientific integrity of studies in the UK because some experts had vested interest in the outcome of the research. Dr Hyland provided details of studies that supported his stance, including those undertaken in the Netherlands, Germany and Israel.

## 6.7 The Birmingham Business Community

6.7.1 The Committee received evidence from the Birmingham Chamber of Commerce. The Chamber's submission focused on the growing demand for mobile phone services and the business benefits of an improved telecommunication infrastructure.

6.7.2 The key point raised by the Chamber was that it believed that improving telecommunications infrastructure is crucial for the continued regeneration of Birmingham; 3G is particularly important in this regard. The Chamber believes that 3G will improve business efficiency and productivity, increase business security, tackle transport issues and encourage inward investment.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

- 6.7.3 The Chamber's submission also listed the benefits that it saw 3G bringing to the City and its communities in the areas of community safety, education, environment, health, tourism and communicating with and consulting residents (The Chamber's full letter is in Appendix 4).
- 6.7.4 In conclusion, the Chamber wished to see the removal of the moratorium to enable the Council to retain as much control as possible over the siting of masts.

### 6.8 Ofcom

- 6.8.1 Ofcom is the independent regulator and competition authority for the UK communications industries; in relation to mobile phone technology one of Ofcom's key tasks is to undertake audits. The aim of the audit is to ensure that emissions from mobile phone base stations are below the maximum public exposure guidelines set by the International Commission on Non-Ionizing Radiation Protection (ICNIRP). During each audit, Ofcom engineers measure the frequency and power density of transmissions and measure these against the ICNIRP guideline levels. The results are made available on the Ofcom website.
- 6.8.2 Ofcom have tended to undertake audits of sensitive sites such as schools and hospitals. However, the public and interested groups can request an audit of a particular base station if they have concerns about it. During the course of the review, the Committee approached Ofcom to undertake two audits on its behalf. The sites put forward to Ofcom were those that members of the public had identified as causing particular concern.
- 6.8.3 The Ofcom sitefinder database provides information on all operational, cellular radio transmitters in the UK. The information provided on each site includes the name of the operator, height of antenna, frequency range, transmitter power and they type of transmission. The database is an internet based resource. The committee noted that the information on the database is not easily accessible and is not always accurate.
- 6.8.4 Following a number of issues raised around telecommunications equipment located on a commercial office block in South Birmingham and associated press coverage, we asked Ofcom to audit the emission levels from the equipment in the public spaces around this commercial office premises (see Appendix 6). It emerged from the evidence gathering sessions that Ofcom were not proactive in carrying out emissions audits, but were instead reactive, relying on requests.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

- 6.8.5 The Committee found that accessing Ofcom and ensuring that an audit was undertaken was problematic and time consuming. The Committee felt that a member of the public trying to access the audit service may be deterred by the complexity of the process and the time it takes to get an audit completed. This said once the investigation was underway, Ofcom staff were helpful and indeed responded positively to a request to extend the scope of the investigation. This was in contrast to the management of the premises who were uncooperative.
- 6.8.6 Issues were raised about the installation of masts on a Birmingham hospital. With the agreement of the Chief Executive of the Hospital Trust, arrangements are now being put in hand for the Health Protection Agency to undertake a similar monitoring exercise.

## 6.9 TETRA

- 6.9.1 There seemed to be few specific concerns about the health and safety aspects of TETRA technology until the publication of the Stewart Report on Mobile Phones and Health in May 2000. Although the report did not make any specific recommendations about TETRA technology, it did mention scientific work that indicated that radio signals with modulations around 16 Hz might have an effect on calcium exchanges in cells. The report stated that the evidence was inconclusive, but recommended a precautionary approach in future technology developments.
- 6.9.2 Because the signals from Airwave *handsets* contain a modulation at 17.6 Hz, the Home Office asked the National Radiological Protection Board (NRPB) to look at the health and safety aspects of the TETRA technology used by Airwave. The NRPB's independent Advisory Group on Non-ionising Radiation (AGNIR) published a comprehensive report "Possible health effects from TETRA" in July 2001. The AGNIR experts concluded that it is unlikely that TETRA could pose a risk to health. The AGNIR experts also made eight recommendations for future research to address the remaining areas of uncertainty.
- 6.9.3 The Committee heard evidence from John O'Brien from TETRAWATCH, Inspector John Blakeman of West Midlands Police and Councillor John Hemming. O2 Airwave who supply TETRA chose not to give oral evidence to the committee. Following a further request a written submission was received. Members of the Committee were very concerned and disappointed that O2 Airwave did not attend the evidence gathering session.
- 6.9.4 John O'Brien presented evidence to the committee that covered a wide range of concerns that he and others have about the TETRA system. One of the strongest views expressed by John O'Brien was that he considered there was an alternative to TETRA called TETRAPOL that has the operational benefits of TETRA without the negative health effects and is less costly. The West Midlands Police use TETRA as do 51 other police areas in the UK.





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- 6.9.5 John O'Brien referred to a number of alleged operational limitations of TETRA i.e. black holes, the inability to send or receive photos or video. In contrast, Inspector Blakeman spelt out the operational benefits he found had been achieved.
- 6.9.6 Health concerns relating to the TETRA system for both the public living near to TETRA masts and the police using the handsets were also expressed by John O'Brien. The specific health concerns around what was referred to as the pulsed radiation of TETRA, and its frequency was the particular focus. The fundamental issue raised was that the system uses pulsed microwave radiation, at a pulse frequency of 17.6Hz, which is said to be close to a key frequency of electrical activity in the human brain at 16Hz.
- 6.9.7 Within the West Midlands Police area the TETRA system has been fully operational since 31 October 2004. The Police were keen that the Committee hear about the benefits to the Police service and individual officers using the TETRA system. The most important message was that TETRA provides a much improved system to that which the police previously relied upon.
- 6.9.8 Inspector Blakeman explained that the police are committed to monitoring any possible health implications of TETRA. In partnership with Imperial College, London, the health of a group of 225 officers is being monitored and it is the intention that all police personnel will be subject to a similar monitoring system.
- 6.9.9 Councillor John Hemming as portfolio holder at the time of the review informed the Committee of a piece of scientific research undertaken by the Biomedical Sciences Group of Defence Science and Technology Laboratory (Dstl). Whilst this had generally indicated no adverse effects from the pulse modulated RF fields from TETRA and this was the way it had been generally reported. When, however he had read the report there was a case which did appear to have adverse effects. He discussed the virtue of collecting public records on radiation emission levels in all areas, like noise monitoring for example.
- 6.9.10 In their written submission, O2 Airwave advised the committee that the roll-out of the O2 Airwave system is now complete across England, Scotland and Wales with 51 geographic police forces having taken delivery of Airwave. Across Great Britain there are 115,000 police officers using the system. Within the West Midlands police area, 8500 officers use Airwave.
- 6.9.11 O2 Airwave commented on the health concerns expressed about TETRA handsets and masts, "... the existence of scientifically based exposure limits, provide a sound basis for confidence in the safety of Tetra ... experience demonstrates emission levels from O2 Airwave's TETRA masts are typically hundreds and often thousands of times below these international ICNIRP guidelines."



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- 6.9.12 Significantly, O2 Airwave reported that in terms of the need for future development in the West Midlands "O2 Airwave has no current or anticipated requirements for additional sites to support the Airwave system in the West Midlands".



## 7 Findings – Public Perceptions

7.1.1 The Committee has been very keen to hear from members of the public. The review was publicised in the 'Forward' newspaper and the City Council website, two public meetings were held, one in the north and one in the south of the City and MVA were engaged to undertake a People's Panel using a telephone survey and two focus groups. The full report of the People's Panel can be found in Appendix 3. Copies of correspondence from the public are attached as Appendix 5.

7.1.2 A wide range of issues emerged from contact with the public, we seek to capture these below:

### Health

- There were conflicting views held regarding the links between health and mobile phone masts. There were those who were convinced that there are adverse health affects from mobile phone masts. In contrast there is scientific and medical evidence which disputes such claims and members of the public who accept that the health risks are much exaggerated.

### Birmingham City Council's Moratorium

- There is quite a polarisation of views. On the one hand there are those who believed the City Council, particularly as the largest Council in Europe should take a firm lead and make an outright declaration that until scientific evidence can show that there is categorically no risks, no masts should be able to be built on City Council land and property. On the other hand there are members of the public who believed that by the City Council permitting erection of masts on its own land and property it does at least give it some element of control and leverage. There was concern that a continuing moratorium would simply lead to displacement to other sites where less scrupulous owners would just want the income.

### Consultation

- On this there is almost universal agreement; people believed there is inadequate consultation. Comment was made about how masts suddenly appear overnight and much stronger consultation arrangements need to be in place.



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### Planning

- The current guidelines and planning regulations were criticised for constraining the discretion that the Local Authority has when considering planning applications. There was a consistent view expressed that the Government should be lobbied and asked to revisit the current planning guidelines and legislation.

### ICNIRP Guidelines

- There were considerable differences in opinion about the usefulness of these guidelines and the appropriateness of the levels which were considered 'safe'. The levels adopted by other countries were cited as evidence against the current UK guidelines. The ICNIRP guidelines were also criticised for only taking into account heating effects. Reference was also made to the fact that compliance with ICNIRP guidelines was by self-certification by applicants, with this not being independently checked and monitored.

### Monitoring

- The lack of monitoring of emissions from masts was highlighted. The fact that the mobile phone industry completes a self-certification prior to installation to say that the mast complies with the ICNIRP guidelines but this is never checked by the Council after installation caused concern.

### The Precautionary Approach

- The issues raised include the differences in interpretation and application of the precautionary principle. There was considerable debate about the siting of masts near to schools, hospitals and in residential areas.

### Leases

- Concern regarding the current City Council lease arrangements, in particular the lack of a standard agreement which would enable the City Council to withdraw from an agreement if health risks were proven and would also protect the Council from litigation.

### Visual impact of masts

- Particularly the visual intrusiveness of masts in residential areas; older masts in particular were thought to be very unsuitable



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### Scientific Research

- There were diverse views regarding the scientific evidence available. There was discussion regarding the lack of epidemiological studies in the UK and some discourse regarding who carries out and funds research in the UK.

### Property Prices

- People were concerned about the effects on property values when base stations were built near their homes, the committee was given conflicting evidence about devaluation from a number of sources i.e. S-C-R-A-M and the Royal Institute of Chartered Surveyors.

### Good Quality Information

- This emerged as one of the principle public demands from the evidence taking. Most people said that their views about masts were determined by some of the more sensational stories run in the press. It was felt that there was a real dearth of easily accessible and understandable information about the health risks associated with mobile phone masts. Many saw the City Council as having an important role to play in providing this information and many people felt that with our more disinterested stance (not withstanding the income received) that they would trust the Council on this matter.

### Increasing mobile phone use

- When all was said and done it was generally accepted that mobile phone technology is necessary and that mobile phone usage would continue to grow.

### TETRA

- Concern was expressed about the TETRA system which is being utilised by a number of Police authorities including the West Midlands.

7.1.3 We also commissioned the People's Panel to test public knowledge of the issue and gain information about public concerns. The key findings from the panel were:

### Mobile Phone Masts and the Local Neighbourhood

- The majority of respondents were unaware if there were any mobile



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phone masts in their neighbourhood. Most of those who did believe that there were mobile phone masts believed there was just one.

- A large proportion of respondents were not aware of what a mobile phone mast actually looks like.
- Half of the respondents to the telephone survey indicated that they would not be happy to have a mobile phone mast in their neighbourhood. They also felt that more research and information was needed regarding the safety of masts.
- Levels of concern regarding masts was particularly high in the telephone survey. Almost half of the respondents would only be happy to have a mast situated one or more miles away. Levels of concern were somewhat less in the focus groups. Around half of the respondents highlighted that they would generally not be concerned to have a mobile mast in their neighbourhood, unless there was evidence that they were harmful.

### Mobile Phone Masts and Schools

- The majority of respondents would be very concerned if a mobile Mast was located on a school in their area.
- Respondents in the focus groups felt that until there was clear evidence that mobile phone masts did not cause any harm then it would be better to avoid having masts near to or on school premises.
- Although respondents did not feel that locating masts on or near schools was appropriate, they were not able to point to alternatives.

### Mobile Phone Masts and Radiation

- When asked to compare the amount of radiation emitted from mobile phone masts to a number of household items, mobile phone masts were ranked first in the survey, as the item that emits the most radiation, despite the fact that it actually emits the least.
- Respondents in the focus groups were very surprised to learn about the comparative levels of emissions from some common household appliances (e.g. microwaves, vacuum cleaners, colour TV) and mobile phone masts. Most of the people involved, based on what they had picked up from national newspapers, felt that the highest level of emission came from the masts and were surprised to discover otherwise. It was reported that people would be far less concerned if they were made aware of information such as this. This again highlighted how a lack of information supplied to the public was responsible for the general attitude that mobile phone masts are responsible for emitting high levels of radiation and thus being a danger to people's health.



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### Birmingham City Council and Mobile Phone Masts

- Respondents in the survey were evenly split about whether they believed that Birmingham City Council should prohibit mobile phone operators from installing masts on Council owned land and properties. The focus group members however were less concerned about this, as they would prefer to see the Council regulating the location of mobile phone masts.
- The majority of respondents in the focus groups felt that, providing the money was put to good use, and safety implications considered, then they would not object to the Council charging mobile phone companies should they wish to install masts on Council owned land and properties.
- Despite the concern raised in the survey and focus groups, almost all respondents agreed that mobile phone masts are an acceptable development. Respondents agreed that it was unlikely that people, including themselves, would be prepared to give up their mobile phones.
- All respondents agreed that further independent research was needed into the effects of mobile phone masts. They felt that information should also be made widely available to the public to allow them to make informed opinions on mobile phone masts.



## 8 Findings – The Stewart Reports and Other Scientific Reports on Public Health Concerns

### 8.1 Range of Evidence Provided

- 8.1.1 Our remit was to bring forward a policy framework on whether telecommunications equipment should be located on City Council land. We were not health experts and frequently said so. However, it was impossible to disentangle our evidence taking from the principal concern of health. This is why we placed importance on taking the latest scientific evidence. Oral evidence was received from Dr Stather (Deputy Director Radiation Protection Division of the Health Protection Agency) and who was Secretary to the Stewart Report and also from Dr Mike Clark, Spokesperson for the NRPB.
- 8.1.2 In the UK, the Stewart Report, whose contributors were a number of independent experts, is generally regarded as the most authoritative source on the subject of mobile phones and health. In the course of our deliberations, an updated report was issued in November 2004.
- 8.1.3 The committee also heard evidence from Dr Gerald Hyland, an independent scientist, Dr Jammi Rao, Director of Public Health at North Birmingham PCT and Dr John Walker, a retired scientist.

### 8.2 Contentious issues

- 8.2.1 It is commonly said that the only thing you can be sure of if you get three economists together in a room is that they will come up with three different views on the state of the economy. Similarly, there were sharply different views from the evidence presented to us in scientific terms. The following seeks to identify the key issues:





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- The widespread use of mobile phone technologies is still fairly recent and technologies are continuing to develop at a pace which is outstripping analysis of any potential impact on health.
- There is data which suggests that RF fields can interfere with biological systems. (AGNIR,2003: IEGMP,2000)
- As the use of mobile phone technologies is a fairly recent phenomenon, it has not yet been possible to carry out long term epidemiological studies and evaluate the findings. The Mobile Telecommunications and Health Research (MTHR) programme launched in 2001 and funded by government and industry on a 50:50 basis is currently sponsoring a number of studies including a volunteer study investigating whether emissions from mobile phone base stations can elicit a variety of symptoms in those exposed to them. (University of Essex; Project Director: Professor Elaine Fox)
- There are different views as to the implications of the inevitable growth in the number of mobile phone masts/antennae with the development of 3G technology. The most common assumption is that the greater the number of antennae the greater is the degree of risk. Counter evidence is given on that basis that the closer a mobile phone is to an antennae, the less power is needed to get a good signal and consequently the less the emissions. This view seems to be supported by a recent study in Sweden which found that using a mobile phone in the countryside seemed to provide stronger correlation with reported health issues than for those people living in urban areas.
- A recent paper (Naila Study) has suggested possible effects on brain function resulting from the use of 3G phones, although it is claimed the study has some limitations and needs replication.
- Populations are not homogenous and people can vary in their susceptibility to environmental and other challenges. This remains an outstanding issue in relation to RF exposure and one on which more information is needed. A number of people also report symptoms they ascribe to electromagnetic hypersensitivity arising from exposure to a range of electro magnetic fields (EMFs) encountered in everyday life. We heard concerns from a small number of people who say they are adversely affected by exposure to RF fields from mobile phones.
- The IEGMP considered that children might be more vulnerable to any effects arising from the use of mobile phones because of their developing nervous system. Unfortunately there is no data available to check the impact on children.
- There are ongoing concerns about the use of TETRA by the police and the nature of the signals emitted as well as about exposures to RF from other telecommunications technologies. (i.e. Bluetooth, wireless etc)



### 8.3 A Precautionary Approach

8.3.1 We learnt that the most influential review on this issue is arguably the Stewart Report (IEGMP, 2000) which generally concluded that:

" The balance of evidence to date suggests that exposures to radiofrequency (RF) fields radiation below NRPB and ICNIRP guidance do not cause adverse health effects to the general population"

"There is now scientific evidence, however, which suggests that there may be biological effects occurring at exposures below these guidelines. This does not necessarily mean that these effects lead to disease."

"We conclude therefore that it is not possible at present to say that exposure to RF radiation, even at levels below national guidelines, is totally without potential adverse health effects, and that the gaps in knowledge are sufficient to justify a precautionary approach."

"We recommend that a precautionary approach to the use of mobile phone technologies be adopted until much more detailed and scientifically robust information on any health effects becomes available."

8.3.2 Whilst many local authorities now state that they follow the precautionary approach, we have to say that we did not find it as clearly defined and explained as we had originally expected. In broad terms it talks about being careful and prudent and does make specific reference to avoiding siting around schools and other educational institutions but it does not help in saying what is safe and what is not.

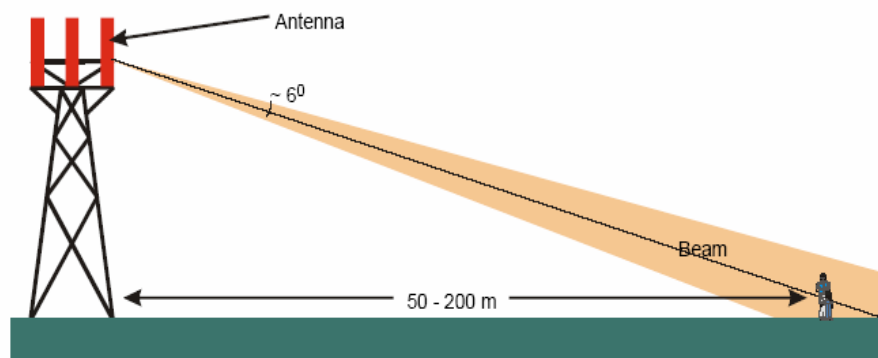
8.3.3 The Stewart Report went on to suggest that the preferred approach to handling the uncertainty would be to adopt the exposure guidelines recommended by ICNIRP, and in addition have a policy that requires best engineering practice for equipment and installations that ensures emission fields are kept to the lowest levels whilst allowing the telecommunications system to still operate effectively. Despite this advice, we found few local authorities were proactive in measuring emission levels independently to ensure compliance with ICNIRP guidelines.



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- 8.3.4 The Stewart Report made specific reference to siting base stations near or on school sites. It reported that in some countries they have prohibited the placement of base stations on sensitive sites such as schools. Although these polices are easy to administer they do not always have the desired effect; for example because of the way in which the beams are emitted a base station near a school may cause higher exposure to pupils than if it were placed on the school building (See Figure 9).
- 8.3.5 The report also reinforced the need to fully consult with the school and parents before an installation is permitted. It also stated that the school and parents should be provided with adequate information to make an informed decision. Furthermore, where a base station is placed outside the grounds of a school that the operator should be required to inform the school (or other educational establishment) of whether the beam of greatest intensity falls on the school grounds or buildings. The key recommendation of Stewart was that where a base station is sited within school grounds that the beam of greatest RF intensity should not fall on any part of the school grounds or buildings without agreement from the school and parents.
- 8.3.6 We found all local authorities that we surveyed had classified schools and hospitals as 'sensitive' areas when considering siting of telecommunications equipment. This does not mean to say there are no such masts on these sites. We made a site visit to one school where based on their understanding of the prevailing technology and beam of greatest intensity, a mast had been erected above the school.

**Figure 9 The " beam of greatest intensity" from an antenna.**  
(Source: The Stewart Report 2000)



- 8.3.7 In his follow up report of 2004, Stewart again focused on the handset as opposed to the mobile phone mast and the principal recommendations were concerning the use of handsets by children. It recommended:
- If there are currently unrecognised adverse health effects from the use



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of mobile phones, children may be more vulnerable because of their developing nervous system, the greater absorption of energy in the tissues of the head (paragraph 4.37), and a longer lifetime of exposure. In line with our precautionary approach, at this time, we believe that the widespread use of mobile phones by children for non-essential calls should be discouraged. We also recommend that the mobile phone industry should refrain from promoting the use of mobile phones by children (paragraphs 6.89 and 6.90).



## 9 Conclusions and Recommendations

### 9.1 The Moratorium

- 9.1.1 Whilst we fully understand the argument that the banning of mobile phone masts on Council land and property sends out a powerful message that the City Council shares concerns about the lack of scientific evidence to rule out health fears, the reality is that mobile phones are an integral part now of most people's lives and are not going to be given up. We have, therefore, put more emphasis on maximising the City Council's limited influence on the current proliferation of masts and sites.
- 9.1.2 If the moratorium was maintained on our sites/buildings, leaving aside a possible legal challenge, this would simply result in the displacement of masts/sites to privately owned locations and public highways. This could well result in mobile phone masts/sites being located in even more unacceptable locations e.g. a mast on the top of a high rise building may be objected to by fewer people than a large number of scattered lower level masts.
- 9.1.3 Any lifting of the moratorium, however, must be complemented and accompanied by a much tighter regulatory regime. The City Council must not be a soft touch and in the interests of the well being of people who live and work in Birmingham, must make it clear that any proposal for a mast to be installed on council land and premises must be on the City Council's terms and not those of the operators. We were struck in the evidence that we took that a few Local Authorities have already enforced a more council regulated as opposed to mobile phone operator self regulated regime. We, in the subsequent recommendations make proposals for a much tougher regulatory regime.

	<b>Recommendation</b>	<b>Responsibility</b>	<b>Completion Date</b>
R1	That, in order to maximise the influence of the City Council over the location and distribution of mobile phone masts and base stations, the moratorium on the use of Council owned land and property be lifted from 1 November 2005 provided that the measures included in the accompanying recommendations (excepting R3 and R19) are put in place.	The Leader	1 November 2005



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R2	That, before the lifting of the moratorium, the City Council puts in place a much tighter regulatory regime specified in more detail in subsequent recommendations.	The Leader	October 2005
R3	That a further comprehensive review of the City Council's policy on the siting of telecommunications equipment on its land and premises be undertaken after three years.	The Leader	2008

### 9.2 Tighter Regulatory Regime

- 9.2.1 The City Council must ensure that it more closely regulates the siting of telecommunications masts on its land and premises. This requires more rigorous regulation at every stage of the process from the original pre-application roll out plan, through consultation at the planning stage to confirming that installations are according to agreed specifications and then monitoring emissions once the mast has been erected. This will give the City Council more influence over mast sitings and should give reassurance to the public that the Council takes its responsibility in relation to the telecommunications industry seriously.
- 9.2.2 An integral component of this tighter regulatory regime is our recommendation that a Member Forum be set up which would be the City Council's main interface with the mobile phone operators. Also that a Chief Officer is identified to both support Members and ensure a consistent approach is followed across the City Council. Our preliminary view is that the Member Forum should consist of a member from each district/constituency and the Chairman of the Planning Committee.

#### Roll-out Plans – The pre-application stage

- 9.2.3 This tighter regulatory regime needs to start at the pre-installation stage where the city council should exercise more influence. This has up until now essentially been discussions with officers. It became apparent in the course of the review that for such an important and sensitive issue for local communities little consultation actually takes place directly with elected representatives. Roll-out plans discussions should take place directly with elected members. This would be undertaken by the advisory Member Forum (outlined in 9.2.2 above) and which would also play a key role in on-going matters relating to implementation and future issues.



### **Consultation at the planning stage**

9.2.4 We are separately recommending (Recommendation 18) that the Government should require full planning permission for all telecommunications installations as is the case in Scotland and Northern Ireland. Notwithstanding this, we would also expect now, as good practice, for the mobile phone operators to exceed the current statutory guidelines with regard to consultation on planning applications for new equipment, and to follow and satisfy the conditions of full planning permissions for all masts, regardless of size.

### **Confirming installations are in line with agreed specifications**

9.2.5 We learned that there are no procedures for checking that an installation conforms to what was agreed during the planning application stage. The City Council needs to put in place an independent means of corroborating this.

9.2.6 Ideally we would have liked to see a condition of future planning consent for telecommunications equipment installed on land not owned by the City Council stating that no legitimate request for inspection can be refused. But in light of Planning Circular 11/95, we are recommending that all approved telecommunication sites are classed as targeted sites which means that they will be inspected by Compliance Officers from Planning Control.

### **Monitoring emissions**

9.2.7 When a base station is installed the operator is required to supply certification that emission levels from the equipment are in line with ICNIRP guidelines for public exposure (Example in Appendix 6). There are concerns about the reliance on self certification. The ICNIRP compliance is not verified by an independent agency or authority. Furthermore, when there is site or mast sharing the certificate is signed by the latest operator to install on behalf of the whole site. We also understand that no actual measurements may be taken and the certificate may be written out by a representative of the operator on the basis of computer modelling.



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- 9.2.8 There is a need to establish an independent audit of emissions to give the public confidence that base stations do not exceed approved guidelines. Although Ofcom as the regulatory body of the telecommunications operators, undertake audit of emission levels, they have given priority to auditing of base stations near to schools and other sensitive sites. This happens on a request only basis. We consider that monitoring should be undertaken of a much broader number of base stations across the city and that this information be made publicly available to help influence siting decisions. There is the opportunity for the City Council to engage more fully with Ofcom and identify potential sites for audit. Alternatively, the City Council could enter into a contract with independent auditors to check emission levels. The choice of site could be random and/or in response to requests by elected members reflecting public concern.
- 9.2.9 Some of the rent revenue the City Council receives from installations should be used to support independent auditing. In the case of existing installations there may be cost implications for the City Council in terms of a sample audit.

	<b>Recommendation</b>	<b>Responsibility</b>	<b>Completion Date</b>
R4	That roll-out plans are fully discussed with the City Council and that an advisory Member Forum is established for this purpose. This Member Forum also to have more general responsibility as an interface with mobile phone operators, to assess the operation of the new regulatory regime and to consider technical and research developments. The terms of reference of the Member Forum to be agreed with the Co-ordinating Overview and Scrutiny Committee.	Deputy Leader	September 2005
R5	That all telecommunications sites which are granted approval should be "targeted sites" to ensure that the equipment installed is in accordance with that shown on the approved plans.	Chairman of the Planning Committee	September 2005
R6	That independent checks are made to confirm that the actual installation of telecommunications equipment conforms to the original specification supplied.	Deputy Leader	September 2005
R7	That independent audits are undertaken of emissions and publicised to ensure public confidence. That base stations do not exceed the current ICNIRP or any future more comprehensive guidelines.	Deputy Leader	October 2005
R8	That a charge to enable independent technical auditing of installations be included in site rental fees.	Deputy Leader	





## 9.3 Operational Arrangements

### Mast sharing

- 9.3.1 A number of witnesses expressed the view that the sharing of masts and sites would reduce visual impact, as well as reduce the numbers of masts generally. We heard that there was a difference between mast sharing (many antennae from different operators on the same mast) and site sharing (more than one mast in one location). Further, the PPG8 and the Code of Best Practice encourage the sharing of masts and sites and we learnt of examples in Birmingham where this policy is being pursued.
- 9.3.2 We also considered the cumulative impact upon the environment of additional antennae sharing a mast, masts sharing a site, and the addition of antennae on existing masts to allow for sharing. Better consideration of the rollout plans should take sharing into account and this with the independent audit of emissions will aid sensible sharing solutions to be pursued.
- 9.3.3 Planning Circulars 4/99 and 29/99 underline the Government's expectation that developers must provide clear evidence that they have fully considered the use of existing masts, buildings and other structures before seeking to erect any new mast. If evidence regarding the consideration of such alternative sites is not considered satisfactory, the local planning authority may be justified in refusing approval to the installation of the mast. The Telecommunications section of the draft Unitary Development Plan, which is now out for consultation, makes clear that mobile 'phone operators will be required to demonstrate why they cannot use existing sites.

	<b>Recommendation</b>	<b>Responsibility</b>	<b>Completion Date</b>
R9	That to reinforce the mobile phone operators' commitment to mast and site sharing wherever this is desirable and practicable, the operators be required to demonstrate why they are taking the course of action that they are, and if it is not fully satisfied, the City Council consider refusing approval to the installation of a new mast.	Mobile Phone Operators  Chairman of the Planning Committee	September 2005

### Leases

- 9.3.4 Different telecommunications operators have negotiated separate forms of lease for their installations with the City Council. These leases are typically for 20 years with provision for a rent review and a break clause specifically for the circumstance of the redevelopment or demolition of the building or premises by the City Council.



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- 9.3.5 As a result, there is little consistency across the City Council in the negotiation and terms of a lease, and thus no uniformity in the approach to installations of telecommunications equipment on council land and property.
- 9.3.6 There are different practices as to whether the income derived from the location of masts is returned to the user of the site. The general practice has been to enable a proportion of the rental income to be used for the users of the building that hosts the installation. Similarly, masts located on school property will see some of the revenue given to the school. There is however, no consistency of approach.
- 9.3.7 Current leases do not include a break clause which would enable the City Council to terminate a contract if it is demonstrated at a later stage that negative health effects are caused by mobile telecommunications equipment.
- 9.3.8 Recognising the caution expressed in the Stewart report with regard to siting of telecommunications equipment near schools, and responding to representations made to us by individual schools, we consider that where a school wishes to re-assess its position with regard to equipment installed on its premises, the Council should do all it can to support the school/educational establishment.
- 9.3.9 A standard approach to the negotiation and agreement of leases adopted across the City Council would strengthen the hand of the City Council.
- 9.3.10 The provision in Recommendation 10 (below) would only be mandatory for new contracts. Existing contracts could only be revised with consent.

	<b>Recommendation</b>	<b>Responsibility</b>	<b>Completion Date</b>
R10	That a standard Lease Agreement is developed and made mandatory for all City Council Directorates. The Agreement must contain the flexibility to terminate the contract should the City Council consider at a scheduled review that research has shown adverse health effects.	Deputy Leader	September 2005
R11	That those lease agreements, with regard to telecommunications equipment on school sites, other educational establishments and social care facilities, within the control of the Local Authority, must be made with the governing body/managers' prior agreement, following appropriate consultation, and must provide them with the flexibility to have the contract terminated.	Deputy Leader	September 2005
R12	That when consent is sought from a school/educational establishment/social care facility for the installation of telecommunications equipment they should be provided with adequate information to make an informed decision, including an explanation of the way in which emissions relate to the distance and direction away from the installation.	Deputy Leader	September 2005



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Deputy Leader

- R13 That at least 50% of the income derived from the siting of telecommunications equipment should be returned for the collective benefit of the tenants/residents/users of that facility and that the implementation of this is reviewed annually.

### 9.4 Communication and Public Information

- 9.4.1 The major concern of interest groups and members of the public is the perceived risk to health from mobile phone masts and base stations. By far the greatest volume of evidence came from individuals, interest and residents' groups whose concerns about the siting and location of base stations and masts derived from their fear of the potential health risks. This fear was compounded by factors such as lack of participation in the decision-making process.
- 9.4.2 The perceived risk and fear arising out of health concerns would be helped by adopting consultation methods aimed at involving elected members and communities more.
- 9.4.3 What emerged from the evidence-giving sessions, and in particular from the People's Panel telephone and focus group sessions, was that there was widespread concern at the lack of reasonably straightforward advice concerning the risks of mobile phones and mobile phone masts. Coupled with this was a view that the City Council – as a reasonably trusted body – had a role in helping to disseminate this information e.g. producing an information booklet.
- 9.4.4 More open consultation arrangements are needed when discussing rollout plans of communications networks and during the passage of planning applications. Whilst these have been shared with officers, Members have not been involved at this stage, nor has the information been proactively made available to local communities.
- 9.4.5 Consultation with schools emerged as an area of particular concern. We heard of peoples' frustration on learning of proposed installations on schools without prior consultation. A case was reported to us of a school being sent a consultation letter during the summer holiday break, leaving little or no time to respond. This particularly sensitive area is affected by bad practice. There should be proper contact with schools on every occasion and directly with the school head teacher and chair of governors when an installation is proposed. The proposal should be rigorously checked to ensure there is no alternative site available. The school should have had the final say on the matter.



**Siting of Telecommunications Equipment on Council Owned Land and Premises**

9.4.6 To avoid any potential misunderstanding, the code of practice needs to include a section on how this two-way exchange of proposals takes place between the City Council and the mobile 'phone operators. Also the city must ensure the mast register is more easily accessible to the public.

	<b>Recommendation</b>	<b>Responsibility</b>	<b>Completion Date</b>
R14	That the City Council produces an information booklet about mobile phone technologies, health concerns, siting, design and appearance. This to be made widely available through all the City Council's normal local outlets. This information also to be put on the City Council's website.	Deputy Leader	October 2005
R15	That a fully comprehensive and up-to-date register of mobile phone masts in the City is maintained and made available to the public, including a readily accessible electronic format and that its availability is publicised.	Chairman of Planning Committee	October 2005
R16	That Ward Members are consistently informed about the receipt of applications for mobile phone masts for their Wards and adjacent areas of neighbouring Wards, and are provided with an up to date picture of all mobile telecommunications apparatus known to be in the Ward on an annual basis.	Chairman of Planning Committee	July 2005

**9.5 Lobbying Government**

9.5.1 It soon became clear that Local Authorities currently have only limited influence on siting decisions because of the way current legislation and regulations are set down. We regard this situation as highly unsatisfactory.

9.5.2 We understand that the government itself is concerned about the lack of consistency in how planning guidelines are applied and to this end has commissioned a review of the Code of Best Practice by Reading University. This has been held up by the general election, but we learned that there is an intention to produce new guidelines. We need to reinforce to the government that if they do see local government as properly reflecting the interests of the local communities they serve, they must allow local authorities more influence in how they deal with applications for mobile phone masts. There are already procedures where in Scotland and Northern Ireland full planning permission is required for all installations of telecommunications equipment and we should expect the same in England also.



## Siting of Telecommunications Equipment on Council Owned Land and Premises

9.5.3 Where telecommunications equipment is being installed on land and premises not owned by the City Council, we have to fall back entirely on existing planning regulations and guidelines. In the context of greater cooperation, the message needs to be given to the mobile phone operators that we will risk appeals against refusals for planning permission where we feel we need to protect the communities' interests.

	<b>Recommendation</b>	<b>Responsibility</b>	<b>Completion Date</b>
R17	That directly through the Leader of the Council, via the City's MP's and through the Local Government Association, the Government be lobbied to give Local Authorities in England and Wales a stronger role in being able to regulate the installation of telecommunications equipment.	The Leader Local Government Association City MP's	September 2005
R18	That as in Scotland and Northern Ireland the Government is specifically asked that full planning permission be required for installations of all telecommunications equipment.	The Leader	September 2005



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# **APPENDICES**



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