

## Telecomms

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### **MOBILE PHONES AND HEALTH - GOVERNMENT RESPONSE TO THE REPORT FROM THE INDEPENDENT EXPERT GROUP ON MOBILE PHONES (STEWART GROUP)**

The full text of the Mobile Phone and Health report can be found at the Independent Expert Group Website ([www.iegmp.org.uk](http://www.iegmp.org.uk)).

#### **1. STEWART REPORT - THE GOVERNMENT'S RESPONSE**

1.1 The Government welcomes the Stewart Group Report and its comprehensive and thorough review of the issues.

1.2 The report makes helpful recommendations on measures to reduce public concern about the health impacts of mobile telecommunications technologies. Importantly, it provides information for the consumer to help them to make informed choices about their own and their families' use of these technologies.

1.3 We are acting immediately on the findings of the report. Some of its conclusions and recommendations can be actioned straight away. Other issues will require more time for consideration and consultation and we will be issuing further information in due course.

#### **2. THE CONTEXT**

2.1 With over 27 million subscribers in the UK, it is clear that mobile phones are a popular and important means of modern communication. The technology has, and will continue, to revolutionise the way people live their lives and companies do business. The UK is the world leader in mobile telecommunications, with successful mobile network operators offering innovative and competitive services.

2.2 The Government believes that people should be able to make the most of new technology without concerns that it may impact on their health. For this reason, the Minister for Public Health called for an independent expert group to be set up to undertake the world's most comprehensive review of the possible health effects of mobile telecommunications technologies.

2.3 The Independent Expert Group was set up under the chairmanship of Sir William Stewart and has published its report today.

2.4 In his foreword to the Report, Sir William Stewart states that

"the balance of evidence does not suggest that mobile phone technologies put the health of the general population of the UK at risk. There is some preliminary evidence that outputs from mobile phone technologies may cause, in some cases, subtle biological effects although, importantly, these do not necessarily mean that health is affected."

Stewart proposes that a precautionary approach be adopted until more robust scientific information becomes available.

### **3. ASSESSMENT OF HEALTH RISKS**

#### **Mobile Phone Technology**

3.1 The Stewart Group has concluded that the balance of evidence suggests that for mobile phone users:

Exposure to radiofrequency radiation below guideline levels does not cause adverse health effects to the general population.

3.2 However, the Stewart Group has also concluded that there is now scientific evidence that there may be biological effects occurring at exposures below these guidelines. This does not necessarily mean that these effects lead to disease or injury but this is important information.

3.3 The Stewart Group concluded that:

It is not possible at present 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.

#### **Specific Issues**

##### **Drivers**

3.4 The Stewart Group further concluded in relation to the risks of mobile phones that their use in cars can increase the chance of accidents and that drivers should be dissuaded from using phones on the move.

##### **Children**

3.5 The Stewart Group stated that it believes that the widespread use of mobile phones by children for non-essential calls should be discouraged because:

If there are currently unrecognised adverse health effects from the use 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 and a longer lifetime of exposure.

##### **Base Stations**

3.7 The Stewart Group has made a separate assessment of the potential health risks of base stations and concluded that

the balance of evidence indicates that there is no general risk to the health of people living near to base stations on the basis that exposures are expected to be small fractions of guidelines. However, there can be indirect adverse effects on their well-being in some cases.

The Government accepts the conclusions of the risk assessment of mobile phone technology set out in the Stewart Group's report.

## **4. PUBLIC HEALTH ACTION**

4.1 The Stewart Group has identified on the basis of its risk assessment

the need to take a precautionary approach to the use of mobile phone technologies until we have more detailed and scientifically robust information on any health effects.

The Government accepts the recommended precautionary approach advised by the Stewart Group and will, of course, wish to hold further discussion and consultation on specific elements. The Government will be, therefore, taking forward the actions that follow in response to the report's specific recommendations.

### **Standards for mobile phones and base stations.**

4.2 The Stewart Group recommended that, as a precautionary approach

the ICNIRP guidelines for public exposure be adopted for use in the UK rather than the NRPB guidelines.(paragraph 1.27 of the report)

We are not convinced of the need to incorporate the ICNIRP guidelines in statutes. (1.28)  
The Government agrees, in line with the recommended precautionary approach, that the emissions from mobile phones and base stations should meet the ICNIRP guidelines for public exposure as expressed in the EU Council Recommendation of 12 July 1999 on the limitation of exposure of the general public to electromagnetic fields (0 Hz to 300GHz). The Government further agrees that the guidelines do not need to be incorporated into statutes.

### **Mobile phones:**

#### **Standards and Public Information**

4.3 The Stewart Group recommended that

an international standard for the assessment of SAR values from mobile phones should be adopted for use in the UK once it has been demonstrated to be scientifically sound. (1.51)

The Group recommended that information on the SAR values for mobile phones must be readily accessible to consumers

- At the point of sale with information on the box,
- On leaflets available in stores giving comparative information on different phones and with explanatory information,
- As a menu option on the screen of the phone and as a label on the phone,
- On a national web site, which lists the SAR values of different phone types. (1.52)

Government is aware that all mobile phone handsets on sale in the UK already meet the ICNIRP guidelines. We are supporting CENELEC in developing a European standard for measuring the Specific Absorption Rate (SAR) values of mobile phones. The standard will be adopted in the UK once it has been finally approved. The Government agrees that the consumer should have access to the SAR values when considering purchasing a mobile phone. The Government will expect SAR measurements to be displayed at all points of sale and with each mobile phone and on the world wide web. The Government considers that the SAR value should be viewed in context, for example, by comparing the SAR value against the recommended exposure limits. We will work with industry to implement the recommendations.

## **The use of mobile phones whilst driving.**

### 4.4

Drivers should be dissuaded from using either hand-held or hands-free phones whilst on the move. (1.22)

Government agrees with the Stewart Group's view that the use of mobile phones whilst driving can substantially increase the risk of an accident and that drivers should be dissuaded from using either hand-held or hands-free phones whilst on the move. Government launched a publicity campaign in 1998 to warn of the dangers of using a mobile phone while driving and reinforced that campaign at the beginning of this year. There will be further campaigns. The police are content to rely on existing legislation for the powers of prosecution, and they use it. However, if drivers continue to use mobile phones while on the move, the Government will review whether specific legislation is required.

## **Mobile phone use by children.**

### 4.5

The widespread use of mobile phones by children for non-essential calls should be discouraged. The Stewart Group also recommended that the mobile phone industry should refrain from promoting the use of mobile phones by children. (1.53)

Government accepts the Stewart Group's recommendation. The Chief Medical Officer will be discussing with the Stewart Group how best to ensure that parents are aware of these recommendations and the information contained in the report so that they are able to make informed choices about the use of mobile phones.

## **Mobile phone use near essential hospital equipment.**

### 4.6 The Stewart Group understood that

health authorities/health boards issue guidance on the use of mobile phones. They should ensure that all hospitals comply. This guidance should include the placing of visible warning signs at entrances to buildings to indicate that mobile phones should be switched off. (1.47)

Government is aware that the use of mobile phones in hospitals and other sites where the RF radiation could possibly interfere with sensitive equipment and the Medical Devices Agency has already issued relevant guidance. This includes policy advice to hospitals covering restricted areas where mobile phones should not be used and the placing of visible warning signs at the entrances to these areas to indicate that mobile phones should be switched off.

## **Shielding Devices and hands-free kits**

### 4.8 The Stewart Group recommended that

Government sets in place a national system which enables independent testing of shielding devices and hands-free kits to be carried out, and which enables clear information to be given about the effectiveness of such devices. A kite mark or equivalent should be introduced to demonstrate conformity with the testing standard. (1.65)

The Government agrees that shielding devices and hands-free kits should be independently tested and that there should be clear information about the effectiveness of such devices. The DTI have already commissioned independent SAR measurement of hands free kits; the results will be published shortly.

## **Base Stations**

### **Exclusion Zones**

#### 4.9 The Stewart Group recommended

the establishment of clearly defined physical exclusion zones around base station antennas, which delineate areas within which exposure guidelines may be exceeded. The incorporation of exclusion zones should be part of the template of planning protocols that we advocate (1.44).

The Stewart Group recommended that the design of the logo should be taken forward by the British Standards Institute and implemented within 12 months.(1.45)

The Stewart Group recommended that warning signs should be incorporated into microcell and picocell transmitters to indicate they should not be opened when in use.(1.46)

Clear exclusion zones should already be in place around all base station antennas to prevent the public from exposure radiofrequency radiation above ICNIRP guidelines. Different operators currently use different signs which may cause confusion. The Government supports the recommendation for clearer signs around base stations. Government agrees that microcell and picocell transmitters should have warning signs to minimise the risk of undue exposure to RF radiation from being opened during use.

## **Planning Issues**

### **Siting - a more consultative process.**

4.10 The Stewart Group recommended that

for all base stations, including those with masts under 15 m, permitted development rights for their erection be revoked and that the siting of all new base stations should be subject to the normal planning process. (1.36)

The Stewart Group recommended that, at national Government level, a template of protocols be developed, in concert with industry and consumers, which can be used to inform the planning process and which must be assiduously and openly followed before permission is given for the siting of a new base station. (1.37)

The Stewart Group recommended that a robust planning template be set in place within 12 months of the publication of this report. It should incorporate a requirement for public involvement, an input by health authorities/health boards and a clear and open system of documentation which can be readily inspected by the general public. (1.38)

The Stewart Group recommended that an Ombudsman be appointed to provide a focus for decisions on the siting of base stations when agreement cannot be reached locally, and on other relevant issues. (1.62)

The Government is minded to introduce a requirement for full planning permission for all new telecommunication masts, as public consultation is an integral part of the planning process. We will need to consult widely before doing so including the principle and precise scope of any new arrangements. We shall issue a consultation paper on this and related guidance which will include consideration of health concerns.

The Group suggested that the appointment of an Ombudsman would help with planning decisions on siting of base stations, for example, where agreement could not be reached locally. The Government is sympathetic to the objectives of the proposal and feels there are better ways of achieving them, bearing in mind that there is no comparable arrangement in relation to other kinds of development. The role of an Ombudsman would not sit comfortably with the existing appeal process within the planning system.

As regards siting, the Government's view is that the objectives are met by the planning process. When considering applications for new development local planning authorities consult local people and take their views into account in making decisions. Where an authority refuses an application the developer can appeal to the Secretary of State. Pre-applications discussions with authorities and with local people also have an important part to play, providing opportunities to explore alternative approaches to the siting and appearance of masts.

## **Emissions from base stations - measurements and audit.**

4.11 The Stewart Group recommended that

a national database be set up by Government giving details of all base stations and their emissions. This should include the characteristics of the base stations as described in paragraphs 6.47 and 6.48 and should be an essential part of the licence for the site. (1.39)

The Stewart Group recommended that an independent random, ongoing, audit of all base stations be carried out to ensure that exposure guidelines are not exceeded outside the marked exclusion zone and that the base stations comply with their agreed specifications. If base station emissions are found to exceed guideline levels, or if there is significant departure from the stated characteristics, then the base station should be decommissioned until compliance is demonstrated. (1.40)

The Stewart Group recommended that particular attention should be paid initially to the auditing of base stations near to schools and other sensitive sites. (1.41)

The industry already maintains a national database of all base stations and emission levels. Government will explore further with industry the development of the database. The Government also agrees that there is a need to establish an independent audit of emissions to give the public confidence that base stations do not exceed approved guidelines. We will seek to implement a national measurement programme and will be discussing this further with the Radiocommunications Agency. Auditing of base stations near to schools and other sensitive sites will receive priority and this will include measurements of the beam intensity. We will consider how best to make this information publicly available and relevant to siting of base stations.

## **Base stations - keep exposure low**

4.12 The Stewart Group recommend that

in making decisions about the siting of base stations, planning authorities should have the power to ensure that the RF fields to which the public will be exposed will be kept to the lowest practical levels that will be commensurate with the telecommunications system operating effectively. (1.43)

The Stewart Group recommended that operators actively pursue a policy of mast sharing and roaming where practical. (1.54)

The Government would expect an efficient mobile network operator to ensure that this recommendation is met already. However, it will be exploring with the industry ways to ensure this recommendation is met.

The Stewart Group also examined the value of mast sharing and roaming agreements which can offer advantages in terms of providing a better service in rural areas and limiting environmental intrusion. We already require a network operator to examine the possibility of using an existing mast or structure before seeking to put up any new mast. We expect that any operator should be able to verify that this has been considered. We shall also pursue with the industry the report's recommendation that operators pursue a policy of roaming where practical to obviate the need for excessive build-out of networks in rural areas.

**Base stations near or in school grounds.**

4.13 The Stewart Group recommended that

particular attention should be paid initially to the auditing of base stations near to schools and other sensitive sites. (1.41)

The Stewart Group recommended, in relation to macrocell base stations sited within school grounds, that the beam of greatest intensity should not fall on any part of the school grounds or buildings without agreement from the school and parents. Similar considerations should apply to macrocell base stations sited near to school grounds. (1.42)

Government agrees that schools and parents should be reassured that the base stations near schools and other places where children spend considerable time operate within guidelines. We will be working with the Stewart Group on the further issues regarding measurements of emissions from base stations on or near schools and how to take forward the recommendation on the 'beam of greatest intensity'.

We will also be writing to local education authorities in the next few days regarding the Stewart report and will be issuing further guidance to schools and local education authorities in light of the action we have set out in paragraphs 4.5, 4.10 and 4.11.

## **Health Related Research - filling in the gaps in knowledge.**

4.14 The Stewart Group recommended that

priority be given to a number of areas of research related particularly to signals from handsets (1.57)

The Stewart Group recommended that a substantial research programme should operate under the aegis of a demonstrably independent panel (1.58)

The Stewart Group further recommended that this programme be financed by the mobile phone companies and the public sector (industry departments, health departments and the research councils), possibly on a 50:50 basis. (1.59)

The Stewart Group recommended that a register of occupationally exposed workers be established and that cancer risks and mortality be examined to determine whether there are any harmful effects. If any adverse effects of exposure to RF radiation are identified then the Health and Safety Executive should establish a system of health surveillance. (1.29)

The Government agrees with the Stewart Group that there is an urgent need for further research into the potential health effects of mobile communications equipment. The Government is commissioning a comprehensive programme of research costing several millions of pounds, which will result in further research findings emerging over the next few years. This work should also encompass emerging radio-based technologies.

Discussions have taken place with the industry about funding a UK based research programme and they have given their agreement in principle to support such a programme. It has been agreed that any research undertaken must be independent and scientifically rigorous. It should meet the research requirements suggested by the World Health Organisation and follow their criteria for good laboratory practice. It should also fit with similar work done in other countries and with the EU Framework projects in this area. An appropriate mechanisms for channelling industry support for research, so that it does not prejudice the independence of the work, will need to be determined. It is planned to launch this programme by September 2000.

The Stewart group proposed that a register of occupationally exposed workers should be established. A three year study is currently being undertaken to assess the feasibility of conducting an industry-wide epidemiological study to investigate any relationship between RF and the risk of damage to human health.

One aim is to develop a protocol to estimate total RF exposure during employment. The Government will consult with the Health and Safety Commission and others on how the Stewart's Group recommendation might best be taken forward in the light of the outcome of this study

### **Further Review**

4.15 The Stewart Group recommended that

the issue of possible health effects of mobile phone technology should be the subject of a further review in three years time, or earlier if circumstances demand it.(1.60)

The Government is keen to maintain the momentum of reviewing the health effects of mobile phone technologies and recognises that the IEGMP recommends a further review in three years' time. We will be asking the NRPB to keep further research in this area under continual review and to report to us on progress with both national and international research activities in three years time or when significant information becomes available.

## **Public Information.**

4.16 The Stewart Group recommended that

national and local government, industry and the consumer should all become actively involved in addressing concerns about possible health effects of mobile phones (1.24)

The Stewart Group recommended that Government circulates a leaflet to every household in the UK providing clearly understandable information on mobile phone technology and on related health aspects, including the use of mobile phones while driving. This leaflet should additionally be available at the point of sale. The leaflet should be developed in concert with industry, which has already produced some good leaflets. (1.61)

The Government agrees that more information about mobile phone technology should be available. We will be working with the Stewart group on circulating its recommendations and information to the public and we have already started discussions on the production and availability of information on health aspects of mobile phone technology. We will ensure that a leaflet will be issued shortly and be distributed widely as well as available where mobile phones are sold and elsewhere.

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