

# Mobile phones: what parents need to know



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# Mobile phones: what parents need to know

Help and advice about modern  
mobile phones for families  
and carers

This guide offers advice on how you and your children can safely get the best out of mobile phones. We also hope it will make the technology and services easier to understand.

Mobile phones continue to develop rapidly and there is no sign of a let up in the pace at which new features and services are becoming available.

In only ten years, mobiles have evolved from a mobile version of the traditional phone into something closer to a handheld personal computer, TV, video and music system.

In the near future, improved mobiles and networks will offer many other services now only available on computers and the wider Internet. For this reason several of the topics discussed here relate just as much to computers at home as they do mobile phones.

The challenge for everyone, but particularly parents, is to make sure children fully understand and are prepared for the possibilities, both good and bad, presented by new technology.



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# introduction

Although mobiles have brought with them many benefits, there are ways of using them that are antisocial or undesirable. These vary from people having loud mobile conversations on public transport – to ‘spam’ text messages, hoax calls, and harassment.

Access to the Internet has also made available types of material that are unsuitable for children and that many adults may not want to be exposed to either. And – because they are small and desirable – mobiles are often the target of thieves.

To help you and your children stay safe while using their mobiles, this guide includes information that you need to know and raises specific issues to discuss with them (see the ‘talking point’ boxes throughout).

We also give details of who to contact for more information about any of the issues we have introduced.

# before using a mobile phone for the first time

The information found here has been designed to help you and your children get the most out of your mobiles. But, before they first use them, it is worth considering the following points:

- agree with them how you want the phone to be used. An early discussion about the use of paid-for services (like music and video clips or time spent on the Internet) can avoid nasty surprises with the first bill
- try and discuss adult content issues in a way that lets children feel able to bring up the topic again if they need to. Although it is possible to block or filter access to adult material, that doesn’t mean that their friends use phones or computers on which this has been effectively done
- you will probably need to have more than one conversation on mobile phone safety as new services and possibilities emerge all the time
- advice and rules agreed within the family may need to change as children grow older – to reflect the greater levels of trust you place in them
- it is a good idea to share experiences about modern technology with other parents. Doing so may help shed useful light on issues before they become a problem for you or your children

# adult content and the Internet

## What is 'adult content'?

Modern phones – and especially those that allow access to the Internet – offer a range of services and information intended for adults.

In this sense, mobile phones are becoming more like computers and are used as a doorway or 'portal' to a wide range of resources and material. Not all of this is suitable for children or even some adults. In particular, there are sites containing pornography, violence and gambling that many parents will find unwelcome.

## Does the phone I've bought give access to the Internet?

These days the answer is probably yes – and definitely so if the phone is either '3G' or 'WAP enabled'. See the phone jargon section at the end of this guide.

## How do I block adult material?

Orange offers a service called 'Safeguard' which is a filtering service covering Internet content. Orange Safeguard is designed to prevent anyone under the age of 18 from reaching adult content, whatever its source, while enabling them to surf the rest of the Internet. The filtering service follows the **Independent Mobile Classification Body** ([www.imcb.org.uk](http://www.imcb.org.uk)) guidelines.

## Does my phone have the filter?

The Orange Safeguard filter is automatically applied to all new 'pay as you go' accounts. Orange Safeguard is not applied, however, to 'pay monthly' or contract customer accounts as anyone with such an account is assumed to be over 18, having been through a credit reference process at the time of purchase.

However, if a parent or guardian has provided a contract phone to someone under 18 – or a handset is being passed down from an older brother or sister – they can contact Orange customer services (call **150** from your Orange phone or **07973 100 150**) to request that Safeguard be applied to that phone account.

Customers who are aged 18 or over and want to receive adult content can verify they're over 18 in three ways:

- by making a credit card transaction via customer services (call **450** from your Orange phone or **07973 100 451**). This can take the form of a PAYG top-up paid for by credit card (debit cards are not allowed for age verification)
- by customer services making a third-party credit bureau age check. This service should soon be available via WAP
- by taking physical ID – such as a passport – to an Orange shop

For further information please go to [www.orange.co.uk](http://www.orange.co.uk) and in the mobile 'frequently asked questions' section select "blocking adult content".

### More information

For more information on filters and how we check customer age, call Orange customer services.

### What is an illegal image?

- The Protection of Children Act 1978, Section 1(1) (a) prohibits the “taking or making” of an indecent photograph or pseudo-photograph of a child. For the purposes of this act a child was defined as being less than 16 years old
- The Sexual Offences Act 2003, which came into force on 1 May 2004, amends parts of the Protection of Children Act 1978. “The Protection of Children Act 1978 – meaning of “child” – increased from 16 to 18 years of age”

### Reporting potentially criminal Internet content: The Internet Watch Foundation

If you believe that you have encountered illegal images on the Internet you can report this to the Internet Watch Foundation (IWF).

The IWF was formed to “work in partnership with internet service providers, telecommunications companies, mobile operators, software providers, the police, government and the public to minimise the availability of online illegal content, particularly child abuse images” (IWF website).

### Making a report to the IWF:

You can do this on their website, via either:

- email to [report@iwf.org.uk](mailto:report@iwf.org.uk)
- computer [www.iwf.org.uk](http://www.iwf.org.uk)
- WAP (i.e. on a mobile handset) on [wap.iwf.org.uk](http://wap.iwf.org.uk)

## talking points

- remind your children that there are things on the Internet that are upsetting and unsuitable – even for adults
- encourage them to tell you or a trusted teacher if they see anything which disturbs them – either on their phone or a friend’s
- children may not always be using the phone or computer you bought them. So, you may also wish to point out that looking at – and especially paying for – any form of illegal pornography encourages more to be made and so increases the amount of distress caused



# online chatrooms

## What are they?

Chatrooms are websites where people exchange messages with one another in more or less 'real time' – they are a type of open forum on the Internet.

There are thousands of examples that cater for almost every imaginable hobby or interest. Some of the most popular versions appear on the fan sites of pop stars.

Children often see chatrooms as friendly and unthreatening places they can visit in order to swap experiences and information. Some children even reinvent themselves away from the critical scrutiny of siblings and schoolmates.

But the fact that chatrooms attract children has also drawn the attention of paedophiles, who are able to conceal their age, background and intent, and use web conversations to form inappropriate relationships with children. This activity is linked to a hazardous conditioning process known as 'grooming'.

## Are chatrooms dangerous?

Although chatrooms are not dangerous in themselves they can become a real hazard if a child using one responds unwisely to comments or activities on the site.

The biggest and most likely danger is that a child may be tempted to arrange a meeting with someone contacted through a chat site. And not everyone contributing to a 'thread' – an online conversation – is necessarily who they appear to be.

To avoid this risk some chatrooms (including those run by Orange) are supervised by moderators, who work to ensure that:

- no personal or location information is exchanged
- inappropriate or sexually suggestive comments are removed
- inappropriate or offensive images, text or other unwanted postings are prevented or removed

### What can you do?

No filter can entirely protect users of the Internet – whether on personal computers or mobiles – from those with criminal or antisocial intentions. There are always people trying to find ways around the existing protections.

In this respect, the Internet – and chat rooms – can be seen as equivalent to a real outdoor public space. Just as sensible precautions and an understanding of the risks are the best protection in the real world, so they are in its virtual equivalent.

With this in mind, the best defence you can offer your child will be the warnings and preparation that you give them.

### More information

There is a helpful section on web safety at the **Department for Education and Skills** site [www.parentscentre.gov.uk](http://www.parentscentre.gov.uk)

For more information on the subject of IT security see the section on the **National Children's Home** website [www.nch.org.uk/itok](http://www.nch.org.uk/itok)

Or here at [www.thinkuknow.co.uk](http://www.thinkuknow.co.uk)

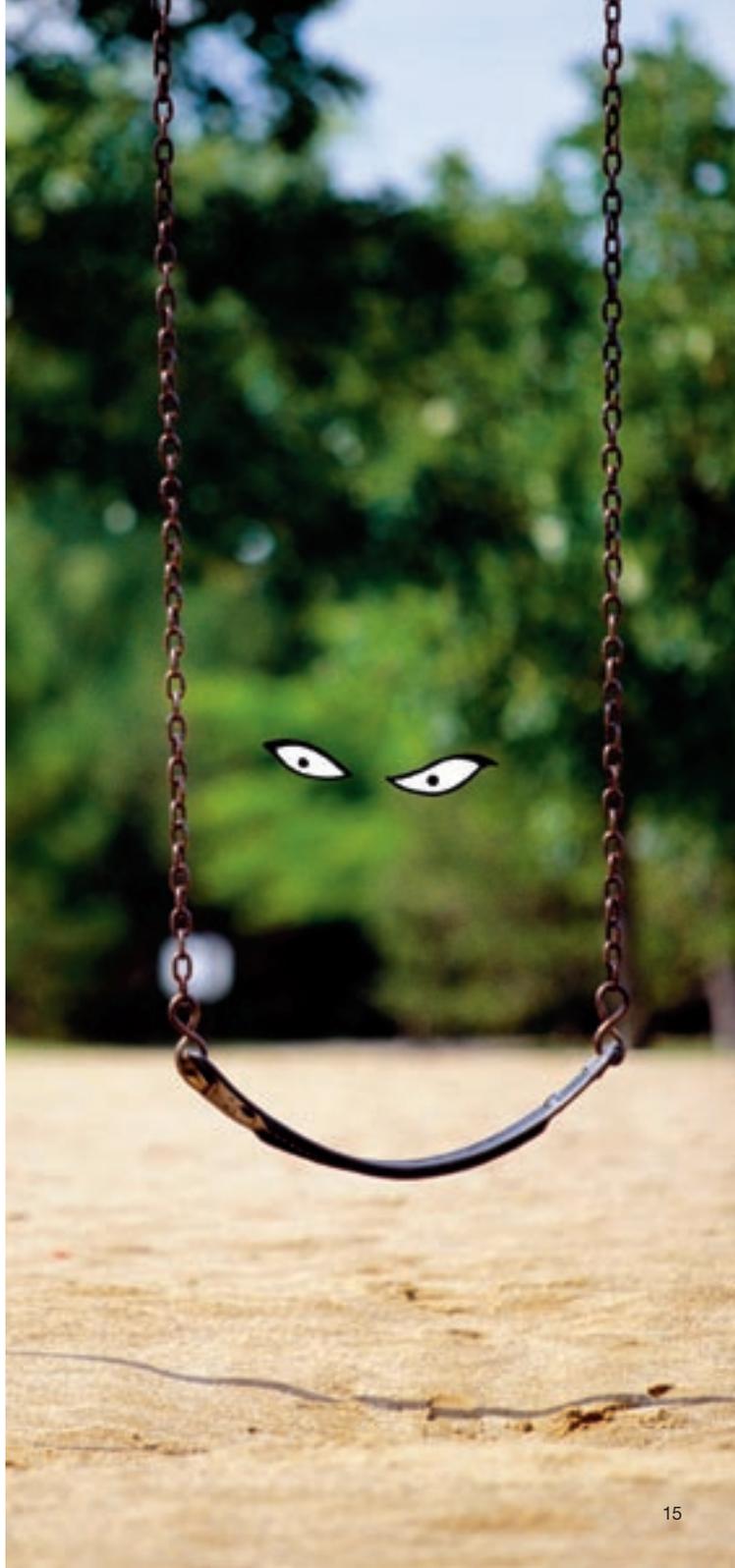
The charity, **Childnet** has produced this site [www.chatdanger.com](http://www.chatdanger.com)

**Virtual Global Taskforce.** This is a liaison project concentrating on safer internet operation between police forces in the US, UK, Canada and Australia. [www.virtualglobaltaskforce.com/index-corporate.html](http://www.virtualglobaltaskforce.com/index-corporate.html)

## talking points

Here are some simple precautions for children that can greatly lessen the risk of a chance encounter with someone who is not who they seem to be:

- never attempt to meet up with anybody they come across in a chat room – unless accompanied by a parent
- never give out personal information, phone numbers (theirs or anyone else's), e-mail addresses, name of school or photographs
- avoid un-moderated chat rooms unless doing so with parental supervision
- never have secrets with anyone online
- anything suspicious should be reported to the moderator or by using the Virtual Global Taskforce logo found on some sites
- children should trust their instincts: if things feel creepy or strange then leave the chat room and tell a parent or guardian
- don't open any websites posted to you in chat rooms – they could contain computer viruses or disturbing material



# 'social networking' websites

The last couple of years have seen a rapid expansion in the number of websites that allow users to publish their own home page or 'profile'.

They are popular with children and young people both as a means of self-expression and as a way to forge links with friends – an activity some call 'online social networking'.

The growth of these sites has been a phenomenon. For example, in the two years since its 2004 launch, MySpace accumulated over 76 million new members. It now ranks as America's third most popular website.

Networking sites are typically used as a place to post online diaries in the form of 'blogs'. They will often also contain pictures; lists of likes and dislikes; contact details; links to other content and more or less anything else the user feels like showing. Most sites also have the ability to leave messages.

To make the experience more appealing still, some sites offer software to allow users to decorate their own page with free graphics and artwork.

Web spaces of this kind that are specially designed for mobile devices are already available. However, for all intents and purposes, the distinction between mobile and 'ordinary' content is disappearing fast as modern phones develop better and quicker web access.

Popular sites of this type include [MySpace](#), [Bebo](#), [Facebook](#) and [Lunarstorm](#). There are believed to be at least 200 currently in operation.

## Should I worry?

Websites of this sort usually have clear guidelines that users are asked to read before they sign up. These can include 'house rules' on user-age and advice on what not to 'post' – as well as a means of reporting undesirable or illegal content. Some also have dedicated teams of people to 'take down' inappropriate postings. Nevertheless, concerns about these sites remain. They include:

### ■ visibility

Teenagers – a large proportion of users of these sites – don't always grasp that the material they place on these sites is visible to anyone in the world with a computer. For this reason comments, personal details or images posted on these sites are not in any sense private

### ■ oversight

To ensure that children are using such sites sensibly and considerately parents need to know which services their children are using and the user names they employ. At the moment, many parents don't know either

### ■ unwelcome visitors

As a magnet for teens, such sites are also a lure to all sorts of people that parents would prefer their children did not encounter. These include: paedophiles, child pornographers, recruiters for extremist groups and those promoting dysfunctional conditions like self-harm, suicide obsession or eating disorders

### What can I do?

- familiarise yourself with how these sites operate and then reach an understanding with your child that you will periodically review what they post on their profiles. If this seems slightly invasive, ask yourself how comfortable you would feel letting your child contribute to the local paper or TV station without your oversight?
- use any obvious mistakes as an opportunity for both you and your child to learn – rather than overreact. These websites are not going away and you and your child will have to cope with the complexities of online activity for the rest of your lives
- regularly discuss your child's online activities in a way that encourages them to be open. It is generally easier for a child to cover their tracks than it is for parents to uncover them. An open and honest dialogue will help reduce the need to worry
- keep in touch with the parents of your children's friends. That way emerging issues will be easier and more quickly dealt with in a co-operative way

### talking points

- remember that anyone, anywhere, can see what you have posted. So be careful what you say: it may affect more than you think. In America, some college recruiters and potential employers have taken to checking applicant postings on such sites
- be careful posting pictures and information about yourself if it could identify where you live, go to school or otherwise spend time
- never post pictures that embarrass other people or show them partially clothed: this is especially true of images taken of other children. Sending your photo to chat rooms is also not a good idea and can be dangerous
- treat others as you would have them treat you: politely and with respect
- be careful who you share information with and remember that a 'friend of a friend' may be no friend to you. Do not reply to messages from people you don't know
- report anything odd or disturbing – or instances of bullying – to an adult and the website itself



# location-based services

## What are they?

Location-based services (LBS) are a group of services that depend on a mobile network knowing where a mobile phone user happens to be.

Your position is established by the radio link between your handset and the nearest mobile base station or 'phone mast'. Even when your phone is not in use, as long as it remains switched on, it regularly sends out signals to ensure that it is in communication with the nearest available base station.

Because this activity is logged by the network it gives the operators an approximate position. This becomes more accurate if there are several base stations nearby which is why these services work better in urban areas.

In the main, LBS services are systems designed to help find people who have agreed to be located by their company, friends or family. There are also versions designed to find children or people with a disability. Others are set up to trace machines and vehicles.

The same technology also provides location-sensitive services. These reflect where the user happens to be, for instance weather news or details of shops.

Some location services can be used simply to work out your own position – in a similar way to satellite Global Positioning Systems (GPS) used in outdoor activities – although the phone version is usually less accurate.

## Who gets the information?

The request for location can come from the user, from another individual or an organisation such as an application provider or network.

### Should I worry?

When a location is requested, the customer (the person being located) has to give permission for the request and there should also be frequent text reminders to the handset that the location service remains in operation. But there are concerns. These focus primarily on:

- unwhitting use. Some have suggested that 'spam' – type messages could trick people into signing up for location-based services without fully understanding the implications of what they are doing
- security of children. It has been thought that if third parties were able to persuade the end-user of a mobile phone to consent to tracking, the use of this information could put children at risk

While the need for precautions is obvious in the case of children, it also applies to any adult who is avoiding the unwanted attentions of another individual.

### Code of Practice

The main protection against unwhitting use of LBS comes from the location industry code of practice, developed in 2004.

For more details go to:

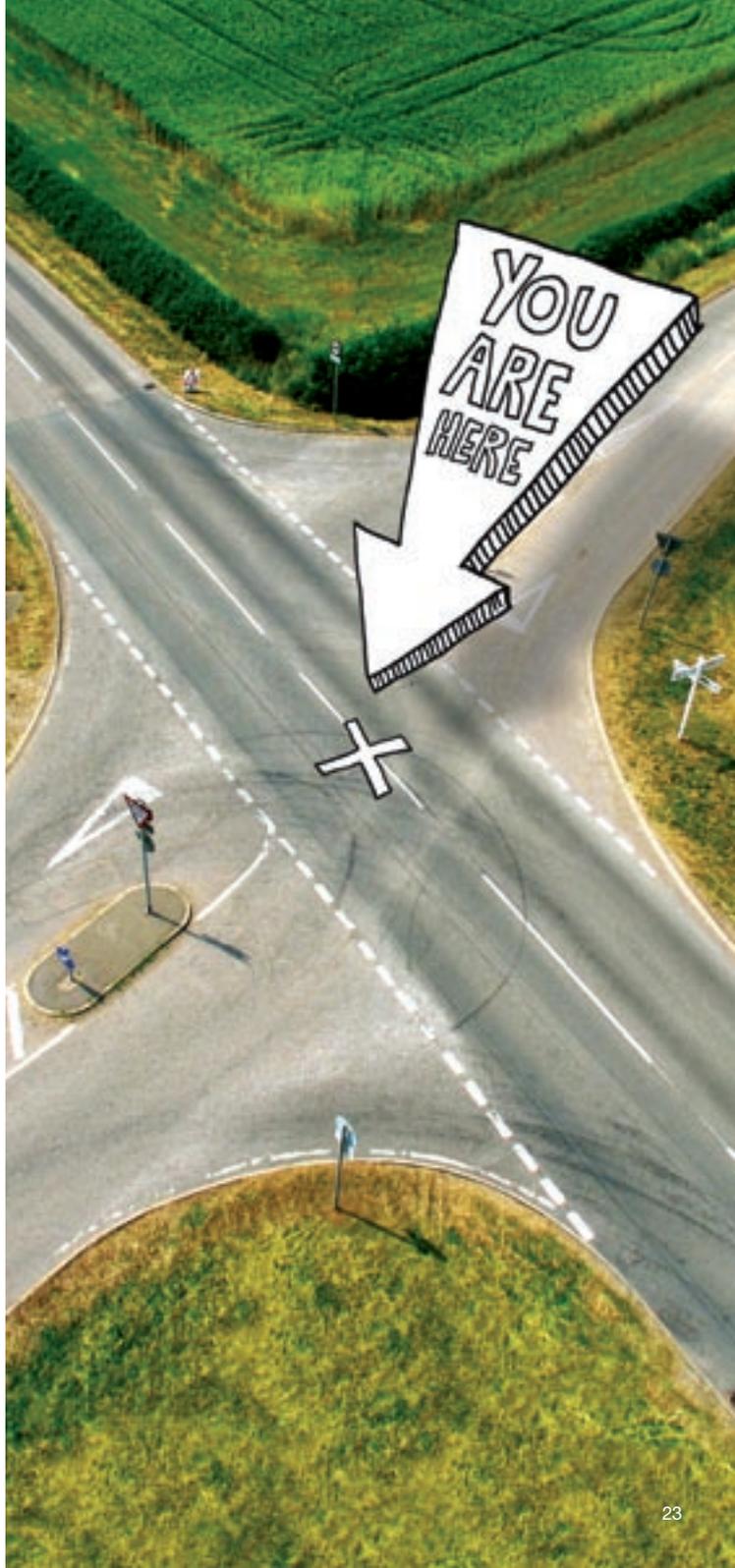
[www.orange.co.uk/documents/regulatory\\_affairs/ls\\_cop\\_locationservices\\_outline\\_240904.pdf](http://www.orange.co.uk/documents/regulatory_affairs/ls_cop_locationservices_outline_240904.pdf)

### More information

If you have any suspicions that an LBS is being used inappropriately please call Orange customer services.

## talking points

- ensure your children understand why they should never say 'yes' to a stranger or someone they don't trust who is trying to find them through a location service and ensure your children understand why this is important
- explain that they should ask you before accepting any kind of service offered over the phone and, if they are not sure, it is always best to check



# bullying and harassment by mobile

## What is this?

Familiarity with mobile technology has enabled some children to develop ways of using mobiles to intimidate and harass others.

For instance they may:

- leave threatening voice messages
- send threatening text messages
- distribute images taken with phone cameras

## What are the signs this is happening to my child?

Intimidation by phone may be part of a wider pattern of bullying and is all the more unpleasant because it reaches into the home.

Bullying can cause feelings of shame and hopelessness which children are often reluctant to discuss, feeling that they should be able to cope by themselves. There are many possible signs that may suggest a problem including unexpected changes in behaviour; unexplained cuts and bruises; an unusually quiet or withdrawn manner or persistent attempts to avoid school though feeling 'unwell' for instance.

If bullying is suspected it is vital that you take it up with teachers as soon as you can.

If necessary, any problems connected with a child's mobile can also be dealt with specifically. The main options are to:

- arrange for the phone number to be changed
- call the Orange Malicious Calls Bureau, via customer services

If you wish, we can supply relevant information to the police. However, under Data Protection law, we cannot supply caller information directly to you.

## Who to call?

If you need advice on what can be done or how to obtain police involvement, call Orange customer services who will refer the information to our **Malicious Calls Bureau**. The Bureau will then contact you.

## And remember...

Harassment and bullying by mobile phone can be dealt with as an offence under Section 127 of the Communications Act 2003, regarding the improper use of public electronic communications networks.

## More information

The following sites contain information on the subject of bullying in general:

[www.bullying.co.uk](http://www.bullying.co.uk)

[www.kidscape.org.uk](http://www.kidscape.org.uk)

[www.parentlineplus.org.uk](http://www.parentlineplus.org.uk)

And these have information on bullying and text messages:

[www.nch.org.uk/information/index.php?i=237](http://www.nch.org.uk/information/index.php?i=237)

[www.bbc.co.uk/schools/bullying/mobile.shtml](http://www.bbc.co.uk/schools/bullying/mobile.shtml)

## talking points

Before your children take their mobiles out and about, it is good to give them the following advice:

- never give out any information about yourself unless you know the caller
- let the caller identify themselves – particularly if no number is displayed
- if you receive a call from a problem number, don't respond: divert such calls to your mailbox without answering
- do not leave alternative contact details on your mailbox greeting
- be **very** careful who you give your number to and ask those you have given it to not to pass it on
- turn off the Bluetooth® function on your phone if this is how unwanted messages are being received

Let them know that if they don't know who a text message is from, they shouldn't reply to it (it could even have been sent to the wrong number or to a number made up at random), and that if they receive a nuisance text they should:

- show it to a trusted family member, teacher or parent
- keep the message as evidence
- make a note of the sender's number or the originating details they'll find at the end of the message

Lastly, explain to your children that all text messages and calls can be traced and that bullying behaviour of this sort is never acceptable and can cause real suffering.



# misuse of mobile phones – false emergency calls

One of the most widespread and dangerous forms of mobile abuse is the making of false emergency calls. In Greater London the number of malicious false calls runs to 10,000 a year, the majority of which are made by children in their early teens. An increasingly high proportion of these calls come from mobile phones.

False alarms do not just waste the emergency services' time. Any unit called to a false alarm cannot respond to a genuine emergency. In other words, far from being a 'prank', these calls actually put other people's lives at risk.

## talking points

- when giving a child a mobile phone, point out the danger and irresponsibility of hoax calls before use
- point out that such behaviour has consequences for them as well as those they endanger. Making false 999 or 112 calls is a criminal offence and can result in an application by the emergency services to have the offending phone terminated from the network. It can also lead to criminal proceedings
- care should also be taken when handsets are in bags or pockets. They are designed to allow 999 calls even with the keypad locked
- all 999 or 112 calls can be identified



# phone theft

As mobile ownership has increased, phones have gradually become 'fashion accessories' – especially for young people. This, along with their relatively high value, small size and ease of resale has increased their attraction to thieves.

It is a good idea to ensure that if the phone is stolen it cannot be used again.

If a phone is lost or stolen it is important to call Orange customer services as soon as possible. Orange will bar the SIM card\*, block calls from the phone account and immobilise the phone using the IMEI number.

\* A SIM card (Subscriber Identity Module) is the removable chip inside a mobile phone which contains information such as the user's phone number, phone book as well as other information related to the subscriber.

### What is an IMEI number?

This is a unique identifier for a particular handset and can be found by pressing \*#06# on the keypad.

When you report the theft of a phone, a record of this number will help ensure that operator companies can disable the handset on all networks. It can also be used by the police to prove if a phone is stolen.

It is possible to register your IMEI number, free of charge and online, by visiting the **Mobile Phone Register** on [www.immobilise.com](http://www.immobilise.com). This service also allows police to identify the original owner of recovered phones.

### talking points

For children and young people, the greatest threat of theft comes from other young people. The best ways to reduce the risk are:

- avoid showing a new phone around – except to close and trusted friends
- avoid making calls in very visible and public places – make them discreetly. A high proportion of phone thefts take place when the victim is making a call
- avoid being overheard – especially if arranging a meeting



# young people, mobile phones, traffic and driving

## Driving

Unless you have a hands-free kit, it is an offence to use a mobile in any way while driving and you can be fined for doing so even if the car is in stationary traffic.

If you don't have a handsfree kit it is legally required – and much safer – to pull over, stop in a safe place, and turn the engine off before making or taking a call. Even if you do have a hands-free kit, it is still safer to pull over before making or taking a call. It is highly dangerous to write or read text messages while driving.

## Music players

Mobile phones can be distracting and care should be taken to avoid texting, calling or otherwise using a handset when crossing the road or mingling with traffic on foot.

This is particularly the case now that many mobile phones featuring in-built music players – a source of appeal to children and the early teens. It is very important that you remind them to be extra careful crossing roads, or using bicycles or scooters, while listening to music. You are much more vulnerable to traffic when you can't hear it.

## talking points

The following advice applies to everyone but especially to young people:

- never use a mobile without a handsfree kit while driving
- even if you're using a hands-free device it is safer to tell the caller that you're driving and will call them back later (when your journey has finished or when you've pulled off the road, with the vehicle stopped and its engine turned off)
- if you have an accident while driving and using a mobile phone, the police will be able find out. Such activity may constitute an offence
- do not bicycle or use a scooter with music playing so loud that you can't hear other traffic
- do not cross roads while listening to music or using any other feature of your handset



# spam

## What are unsolicited messages (spam)?

'Spam' is an unwanted marketing message that you have not actively asked for or subscribed to. Examples include messages saying you have won a 'mystery prize' or that 'someone fancies you' or asking you to call a premium-rate number.

Unsolicited messages are really another version of 'junk mail' or the phone sales calls you get at home, generally from people or companies you don't know.

Children can be vulnerable to the services offered by such messages, because they don't always understand the cost of the services being offered – or what they involve.

## How do 'spam' messages work?

Sometimes the phone numbers are randomly generated. Lists of phone numbers can also be illegitimately compiled and sold on to companies as 'marketing lists'. In these cases, the same text is sent to thousands of customers, so you or your child won't have been singled out.

The problem affects all mobile networks, not just Orange. Orange itself does not provide customer telephone numbers to other companies for marketing purposes.

## Ending services

- if details about cancelling a service are not contained in the message, a search on the web, or through directory enquiries, will usually give the sender's contact information. You should then contact the sender directly to remove your number from their marketing list, as you would with unwanted mail
- if you are receiving text messages from a short code number for a service that you subscribed to but no longer wish to receive, try checking their instructions. Typically the way to deregister is to text the word 'STOP' to the service. If you do not have their details, call Orange customer services, which may be able to assist with contact details for the service provider

To stop Orange Marketing Messages please speak directly to Orange customer services.

### How to avoid spam

- read terms and conditions on forms carefully before giving out your mobile number
- you should tick or untick permission boxes when filling in online or paper forms to state that you do not wish to receive marketing messages. Or, if you are using the telephone to give details, let the person you are speaking to know your preferences regarding your mobile phone
- never sign up with websites that promise to remove your name from spam lists. Although these sites may be legitimate, sometimes they actually collect mobile phone numbers

### Send your spam to us

If you get spam messages, please forward them to **7726** free from your Orange phone. By doing this you are helping Orange collate information that may help reduce the volume of spam messages being sent to you and others.

### Notify the watchdog

Suspected premium-rate SMS scams should be reported to ICSTIS – the Independent Committee for the Supervision of Standards of Telephone Information Services. You can contact ICSTIS by dialling **0800 500 212** or by visiting [www.icstis.org.uk](http://www.icstis.org.uk)

### Telephone Preference Service

You can also register – for free – with the **Telephone Preference Service** to stop commercial calls being made to your number. For more details visit: [www.tpsonline.org.uk](http://www.tpsonline.org.uk)

## talking points

- explain the risks of replying to spam messages or calling the number in the message – this may be charged at a premium rate
- encourage your child to ask you before accepting offers on their phone
- explain to your child that if he or she gets drawn into replying to spam it is much better to admit any mistakes to you early on, as you can contact the company directly to stop the service before the bill gets out of control



# picture/video messaging

Taking, storing and sending pictures taken with the camera phones is a significant part of their attraction – especially for children.

However, safe and considerate use of these cameras requires a mix of care and common sense.

## talking points

- never send pictures that embarrass other people or show them partially clothed: this is especially true of images taken of other children. It is best to treat others as you would like them to treat you
  - sending your photo to chat rooms is not a good idea and can be dangerous
  - sending unpleasant or indecent images to others may be an offence in certain situations
  - everyone should obey any restrictions on the use of camera phones in places like swimming pools, schools and some gyms
- watch out for people – particularly unknown adults – taking pictures of you or your friends
  - hitting other people for the purposes of recording the image on a camera phone (sometimes described as ‘happy slapping’) is an assault – and therefore a criminal offence
  - if you are sent an image of an assault on another individual, keep the image and show it straightaway to a parent, teacher or other trusted adult



# mobile phones and health

Mobile phones are small two-way radios. They are only the latest development in a family of devices whose origins date back to the middle years of the last century.

Most mobile phones work in the microwave area of the radio spectrum. This region is also used by some TV transmitters, baby monitors, radar, wireless CCTV, Global Positioning Systems, 'Wi-Fi hotspots', police speed traps, garage door controls and car central-locking systems.

## Research

Despite an extensive record of research going back several decades, the current position remains that there are, "No known health effects below [existing emission] limits" (World Health Organisation presentation, 2004). This view has been reinforced by numerous independent health science reviews carried out around the world in the last few years.

On the other hand, no previous wireless device has ever been used by millions of people on every continent. Because of this popularity, research continues in order to ensure that there are no small – and so far undiscovered – effects on small, possibly distinct groups within the wider population.

In July 2005 the WHO gave a statement regarding radio waves. "To date, all expert reviews on the health effects of exposure to RF [radio

frequency] fields have reached the same conclusion: There have been no adverse health consequences established from exposure to RF fields at levels below the international guidelines on exposure limits published by the **International Commission on Non-Ionizing Radiation Protection (ICNIRP)**.

"The ICNIRP guidelines were developed to limit human exposure to electromagnetic fields (EMF) under conditions of maximum absorption of the fields, which rarely occurs, and the limits incorporate large safety factors to protect workers and even larger safety factors to protect the general public, including children. Thus, the limits in the ICNIRP guidelines are highly protective and are based on all the available scientific evidence."

[www.who.int/peh-emf/meetings/ottawa\\_june05/en/index4.html](http://www.who.int/peh-emf/meetings/ottawa_june05/en/index4.html)

## What protections are there?

All phones sold in Europe must comply with the emission standards compiled by the International Committee on Non-Ionising Radiation Protection (ICNIRP).

Importantly, the ICNIRP guidelines are designed not only to exclude all risk of known adverse health effects, but also to minimise the risk of any potential – but undiscovered – health effects. All Orange equipment complies with these guidelines.

#### Another option

Buy a handset with a lower Specific Absorption Rate (SAR). This is a measure of the amount of energy absorbed by your head when using a particular handset. All handsets sold through Orange comply with international standards. SAR information can be found with each handset and on the website of the Mobile Manufacturers' Forum at [www.mmfaai.org](http://www.mmfaai.org)

#### More information

There is a lot of information about radio waves and mobile phone networks at the Orange site: [www.orange.co.uk/about/phone\\_masts/index.html](http://www.orange.co.uk/about/phone_masts/index.html)

#### Other useful sites include:

**Health Protection Agency**  
[www.hpa.org.uk/radiation/understand/radiation\\_topics/emf/index.htm](http://www.hpa.org.uk/radiation/understand/radiation_topics/emf/index.htm)

**UK Department of Health**  
[www.dh.gov.uk/Home/fs/en](http://www.dh.gov.uk/Home/fs/en)  
(Type 'mobile phone' into the site search engine.)

**International Commission on Non-Ionising Radiation Protection**  
News of research and other material can be found in the activities section at:  
[www.icnirp.de/index.html](http://www.icnirp.de/index.html)

**World Health Organisation**  
provides detailed and extensive information on electromagnetic fields and mobile phones at:  
[www.who.int/topics/radiation\\_non\\_ionizing/en](http://www.who.int/topics/radiation_non_ionizing/en)

And here,  
[www.mcw.edu/gcrc/cop/cell-phone-health-FAQ/toc.html](http://www.mcw.edu/gcrc/cop/cell-phone-health-FAQ/toc.html)

## talking points

If you want – as a personal preference – to reduce your family's exposure to the radio waves emitted by handsets then the following actions could help:

- suggest your children make shorter calls
- try and make calls nearer to phone masts (base stations) as this considerably reduces the phone's power output. Modern phones continually adjust their power in order to extend battery life. The further you are from a mast, the stronger the signal emitted by the handset
- encourage children to send text messages rather than talk (this keeps the handset away from the head)
- encourage them to use a 'hands-free' kit – which can reduce head exposure to radio energy by up to half



# phone jargon

There are many expressions associated with mobile phones and new ones appear with the emergence of each new technology. However, here are some of the expressions you may have come across:

## WAP

Stands for Wireless Application Protocol. This allows users to receive information instantly via handheld wireless devices such as mobile phones, pagers, two-way radios and communicators

## 3G

Stands for 'third generation'. This is a technical standard common across the mobile industry that allows very rapid data transfer. Such high data speeds enable a range of new services like video, internet access and interactive services – mobile 'broadband'

## SMS

Text messages

## MMS

Multi media messages/photo messages – pictures and video you can send and receive with a mobile handset

## Bluetooth®

A form of direct device-to-device radio communications system. It is fitted to many mobile handsets and 'wirefree' headsets and allows phones to communicate when in close range of each other – without the use of the mobile phone networks

## 'Bluejacking'

Some users with Bluetooth®-enabled mobiles use the technology to send anonymous text messages to strangers

## Infrared

A type of invisible light that some handsets and other devices can use to communicate. Most TV remote controls use the same technology. It is an alternative to radio (see Bluetooth®) but requires direct line of sight to work

## Thread

Online conversation in a chatroom

## Blog

Web log – online diary or personal articles

## Flaming

Being rude or inflammatory in a web conversation

## Ringtone

The old fashioned phone ring has been replaced on mobiles by a wide range of sounds from pop songs to recordings of tropical parakeets. Some are free, but most must be downloaded and paid for

## Screensaver

This is the often animated picture shown on phones that are switched on – but not in current use. Can be chosen and paid for

## Wallpaper

The usually still screen image behind a phone's option lists. Can be changed and paid for



