GSM Technology is continually evolving. Having made great leaps forward in the past 10 years, it is facing an even greater evolution in the years ahead.

What do the initials GSM stand for?

Global **S**ystem for **M**obile Communications

What is GSM?

GSM is an open, non-proprietary system that is constantly evolving. One of its great strengths is the international roaming capability. This gives consumers seamless and same standardised same number contactability in more than 170 countries. GSM satellite roaming has extended service access to areas where terrestrial coverage is not available.

What is technically distinctive about the technology?

GSM differs from first generation wireless systems in that it uses digital technology and time division multiple access transmission methods. Voice is digitally encoded via a unique encoder, which emulates the characteristics of human speech. This method of transmission permits a very efficient data rate/information content ratio.

How will GSM evolve?

High bandwidth services are already becoming available through second generation technologies. The development path to 3GSM is clearly mapped out and brings with it the possibilities of sophisticated data and multimedia applications. The GSM standard will continue to evolve, I with wireless, satellite and cordless systems offering greatly expanded services. These will include high speed, multimedia data services, inbuilt support for parallel use of such services and seamless integration with the Internet and wireline networks.

What is 3GSM?

3GSM is the generic term used for the next generation of mobile communications services. These new systems will provide enhanced services to those available today ie, voice, text and data. The concepts for 3GSM services are currently being developed across the industry and by global groups such as the Third Generation Partnership Project (3GPP). The GSM Association's vision of 3GSM is based on today's GSM standard, but evolved to include an additional radio air interface better suited to high speed and multimedia data services.

Will my current mobile phone cease to work when 3GSM systems are launched?

There will be a period in which second generation and third generation systems co-exist. In essence, third generation systems are based on second generation infrastructure and services, but offer a new radio interface, among other features. So your current mobile will continue to operate. It will be up to you whether you wish to access 3GSM services. If you do, you will need to upgrade.

What services will 3GSM offer?

Video on demand, high speed multimedia and internet access are just a few possibilities. The main benefit of third generation systems is that they will offer high end service capabilities, which include substantially enhanced capacity, quality and data rates than currently available. 3GSM services will also include concurrent usage of multiple services and bridge the gap between wireless and internet/computing.

Will third generation systems be truly worldwide and how can I find out about

developments in my own country?

It is likely that there will be up to three types of technology deployed in 3GSM. These systems are being harmonised to ensure they are compatible and will accept multimode handsets. This integration of systems and services will give users worldwide roaming. Your national regulatory authority is the best and most accurate source of information on third generation licences and their availability in your country. However, the GSM Association collates this information as it becomes available and will be happy to help with any queries you may have.

Is there a health risk-using mobile phones?

The international scientific community reviews all relevant research as it is published. The consensus of these expert groups is that there is no demonstrable evidence of a risk to human health from mobile phone use. In addition, it is argued that the low powered radio signals produced by mobile phones do not have sufficient intrinsic energy to affect genetic material. The GSM Association continues to support international quality research into this question and contributes to a programme coordinated by the World Health Organisation.

Is GSM secure?

From the outset, GSM has been a system designed with stringent levels of inbuilt security. With constantly enhanced transmission protocols and algorithms added to the flexible and future proof platform, GSM remains the most secure public wireless standard in the world.

What is the GSM Association?

The GSM Association, based in Dublin, Ireland and London, UK, represents the interests of more than 690 GSM, satellite and 3GSM operators, key manufacturers and suppliers to the GSM industry as well as regulatory and administrative bodies from more than 190 countries and regions around the world. Most of the first third generation licensees are also members. The GSM Association is responsible for the continued maintenance of open standards and interoperability. The global cooperation between operators is most powerfully illuminated by the success of international roaming. One of the Association's major priorities is the development and promotion of the GSM standard worldwide.