

# Stimulating Mobile Broadband Services

*Inspired by the worldwide success of GSM, the EU aims at stimulating the growth of mobile broadband services, delivering significant benefits to European society and industry.*

More than one billion people now use mobile phones based on the GSM standard, developed in the framework of EU research projects and launched via European Council directives and recommendations in 1987 (see box).

The coordinated approach propelled European companies into globally dominant positions in what is today an enormously valuable industry. The sector, however, is at a turning point, as the "second-generation" (2G) GSM-based services peak and third-generation (3G) ones are launched.

3G's ability to carry "mobile broadband services" will be the source of medium to long-run growth in the sector, with mobile phones increasingly being used to access the internet, shop and pay on-line, provide "location-based" services, and receive audio-visual services such as music and video.

Europe must build on its strong position to extend its leadership in mobile communications. This is not, however, just a priority for stimulating growth in Europe's communications industry - mobile broadband services will also drive efficiency in public services and all industrial sectors, significantly improving productivity across Europe's economy. Supplying content and services will also provide opportunities for Europe's cultural sector.

## Pro-Innovation Ground Rules

Growth in high-speed mobile data services is driven primarily by market forces, but it also needs a supportive policy environment.

The EU's new regulatory framework for electronic communications, for example, ensures national regulators promote innovation and competition and provides 'investment certainty' for companies. Further regulation of the emerging mobile broadband services market is not envisaged.

The Mobile Broadband Services Communication looks beyond the regulatory framework to the broader policy environment needed for these services to flourish.

## Five Key Issues

Many ideas came from industry via the *Mobile Communications and Technology Platform*. Established in October 2003, it brought together 14 CEOs from the sector, including mobile operators, equipment manufacturers and content providers.

Together they produced a prioritised set of recommendations for rolling out mobile networks across Europe, with other stakeholders contributing ideas at a workshop in June 2004.

The Communication identifies five key issues:

- **Research and Development:** the share of GDP that Europe spends on R&D in this area lags well behind its main trading partners. Europe needs a strategic R&D agenda supporting innovation, including basic research. Today's Mobile Communications and Technology Platform could provide the vehicle for a strategic research initiative within the EU's Seventh Framework Research Programme for 2007-2010.

## GSM Growth

Europe's success in mobile communications is based on the Europe-wide adoption of the GSM standard. Developed by the European Telecommunications Standards Institute (ETSI) with the support of the European Commission, GSM allowed interoperability between networks, handsets and services.

Suppliers could develop products for a 'home market' of hundreds of millions of people – and did so. The resulting competition drove further development, driving hardware prices down in a virtuous circle. Similarly, EU-wide deregulation of the telecommunications sector stimulated competition between telephone operators, forcing costs down for consumers. Today, more than one billion people – a sixth of the world's population - use GSM mobile phones.

The same approach has been followed for 'third generation' mobile communications with the "UMTS Decision" of 1999, which aimed to create enough EU-wide harmonisation to promote competition based on a common, high quality standard.

- **Interoperability:** interoperability between different infrastructure and terminal solutions is critical to prevent market fragmentation. The converging environment poses new challenges for industry to improve the interoperability of mobile broadband services. Regulatory intervention is not foreseen at this stage.
- **Value-added content:** increasing the quantity and quality of mobile content applications is essential to stimulate demand for mobile communications and the development of more services. Available and interoperable Digital Rights Management (DRM) technologies and a one stop shop for copyright licensing are key issues. The Commission will undertake a further study into potential barriers to the deployment of high-value content and related consumer aspects, while Member States are asked to ensure that the regulatory framework for intellectual property rights is adequate.
- **e-payments:** there is, at present, considerable uncertainty regarding how EC rules on e-money and money laundering apply to mobile payment services, so the Commission has launched a public consultation to clarify the issue. There are also forthcoming proposals on a new legal framework for payments in the EU and a third money laundering directive. Any prudential rules governing the use of "e-money", where relevant to mobile payments, must be applied in a proportionate and risk-sensitive manner.
- **Base stations and masts:** to offer their subscribers seamless coverage, operators must site base stations and masts in thousands of different localities. Member States must address the problems caused by fragmented local policies on siting base stations and should ensure that these are based on the generally accepted assessment of the health risks.

### R-LANs

3G mobile services are likely to co-exist with other wireless services, such as "wi-fi" R-LANs (short range wireless telephone systems using radio transmitters), with users exploiting wireless hot-spots when they can and receiving 3G services over much wider areas.

R-LANs therefore complement 3G. The EC's policy aims to stimulate their development by:

- encouraging Member States to not stifle growth by allowing public R-LAN deployment without any 'sector specific' conditions;
- building on an agreement at the World Radiocommunication Conference 2003 (WRC-03) on spectrum harmonisation, enabling RLAN

systems to use new, less cluttered frequency bands (COM/2003/0707).

### Current Commission Initiatives

Mobile content and services will be a major driver of advanced mobile communications. European policies and activities in this field include:

- intellectual property policies and initiatives to further develop Digital Rights Management;
- the Public Sector Information Directive ensures that this key resource is available in usable form for European content and services;
- Information Society Technologies research, with strategic objectives developing technologies crucial to the digital content industry, from access to cultural heritage to cross-media content for entertainment;
- the eContent programme, encouraging the growth and development of the digital content industry in Europe and
- the Safer Internet programme, which focuses on illegal and harmful internet content.

3G and R-LANS, of course, are not the final word on mobile communications - Information Society Technologies research is already looking at mobile communications technologies in the 2010 timeframe, with strategic objectives on:

- the development of mobile and wireless systems beyond 3G to realise the vision of "Optimally connected anywhere, anytime" and
- applications of mobile communications to areas such as road and air transport.

#### See Also:

- Fact sheets 13 & 14: eCommunications Regulation
- Fact sheets 18 & 19: Safer Internet and eContent *Plus* programmes
- Fact sheet 22: Radio Spectrum Policy

All Factsheets and more can be downloaded from "Europe's Information Society: Thematic Portal", below.

#### Further Information

- **Mobile and Wireless Communications:**  
[http://europa.eu.int/information\\_society/industry/communications/mobile/index\\_en.htm](http://europa.eu.int/information_society/industry/communications/mobile/index_en.htm)
- **Europe's Information Society: Thematic Portal**  
[http://europa.eu.int/information\\_society/](http://europa.eu.int/information_society/)
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