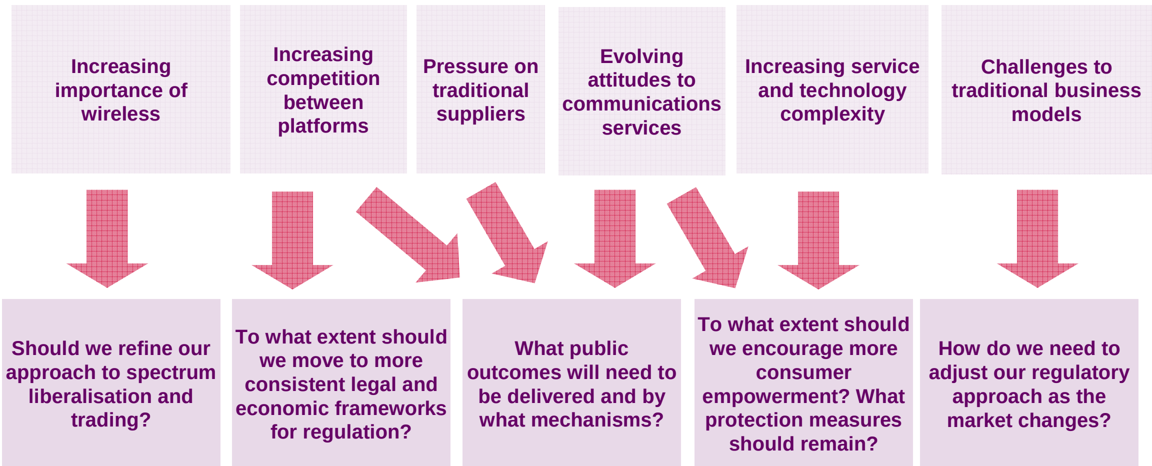
Section Four

The changing communications sector

4.1 This section sets out what we see as the most significant changes in the communications sector, and considers the implications for regulation. This analysis forms the basis for our three-year strategic policy framework, which is described in Section Five.

4.2 Figure 4.1 provides a way of thinking about the changes that are occurring in the communications sector and how we should respond. Regulation will not necessarily be the answer. Indeed, as markets converge and competition increases we expect to be able to remove some regulation.

Figure 4.1: Changes in the communications sector and implications for Ofcom



4.3 We consider each of the changes in turn and examine the questions which they raise for Ofcom. In thinking about how the communications sector is evolving, it is important to distinguish between platforms and services. A platform is a means of delivering services to consumers, and a wide range of platforms is used in the UK, including digital terrestrial TV, cable, satellite, fixed wireless, and fixed and mobile phone lines. The proliferation of services provided using these platforms is a central feature of the converging communications landscape.

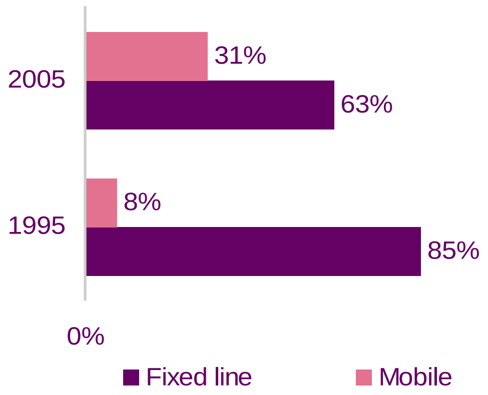
4.4 By convergence, we mean the ability of consumers to obtain more services on a single platform or device – or obtain any given service on multiple platforms or devices. This is driven by many different factors, including technological advances, more open technical standards, increased economies of scale as markets become global, and the adoption by consumers of always-on digital technologies such as mobile phones and broadband.

The increasing importance of wireless services

4.5 The importance of wireless services continues to grow. This has been fuelled by the high value which consumers place on services they can use on the move. Another important factor is that technical advances have made mobile devices more user-friendly. New ways of compressing data mean that pictures and video clips can be sent more quickly. Also, mobile devices have become smaller, can store more data and have increased processing power.

4.6 Our research shows that mobile phones, in particular, are an increasingly central part of people's lives. Figure 4.2 shows that for three out of ten adults in the UK, the main way of making and receiving calls is to use their mobile phones. Ten years ago, this was the case for less than one in ten adults.

Figure 4.2: The main method used by UK adults to make and receive calls



Source: Ofcom communications tracking study & Ofcom estimates

4.7 Wireless platforms and services are likely to be even more important in the future. Many of the new ways of communicating which have emerged in the last five years have been wireless. This trend is likely to continue, with wireless technologies increasingly benefiting from global economies of scale.

4.8 We have seen the rollout of 3G and Wi-Fi networks. New wireless services are emerging, such as mobile TV, mobile music downloads, Wi-Fi phones and services to enable parents to check where their children are. The demand for spectrum is therefore likely to increase.

4.9 We are currently carrying out an extensive programme of work to implement our Spectrum Framework Review, which we completed in June 2005. This involves releasing more spectrum to the market, facilitating spectrum trading and removing restrictions on the use of spectrum through a programme of liberalisation.

4.10 We believe, given the increasing importance of wireless platforms and services, that we should consider how to refine our approach:

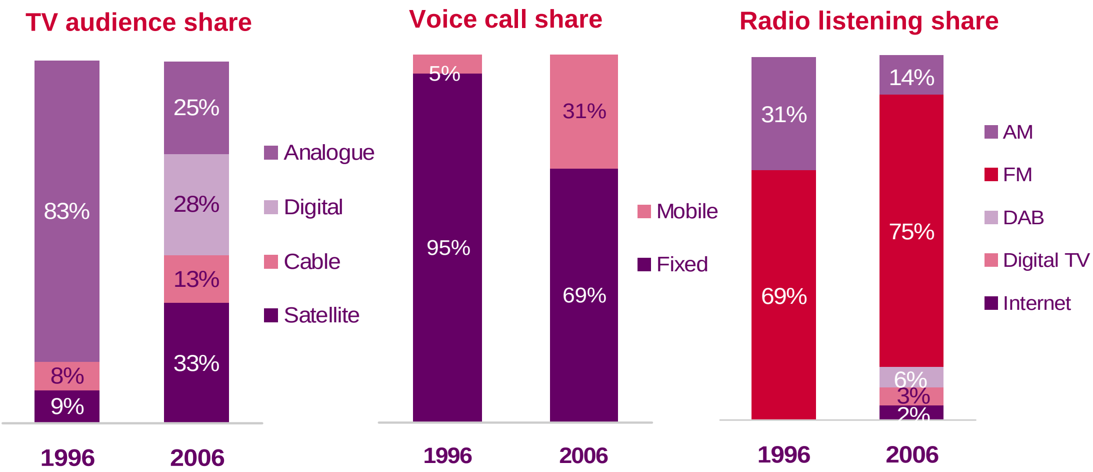
- We should drive forward liberalisation and do more to encourage spectrum trading.

- We should consider our long-term role in relation to spectrum. Some major spectrum awards are in the pipeline and, once these have been completed, our role in releasing spectrum may diminish. On the other hand, we will continue to have a role in licensing and enforcement, international co-ordination will remain important, and some activities, such as defining spectrum usage rights, may increase.

Increasing competition between platforms

4.11 One result of the emergence of new wireless platforms is that it contributes to increasing competition between platforms. Figure 4.3 shows how this is growing and how newer platforms are gaining market share.

Figure 4.3: The rise of new platforms



Source: Ofcom. Figures are estimates only.

4.12 There are a number of reasons for these developments:

- Fixed phone, cable and wireless networks increasingly use Internet Protocol (IP) technology. This means they can increasingly support the same services as one another.

- The components of devices are increasingly modular, so the functionality of a device can be expanded at low cost. A good example is the fact that many mobile phones are no longer simply phones: they can be used to play games, take pictures and listen to music, as well as to make calls or send texts.

- The economies of scale which result from manufacturing equipment for a global market create an incentive to produce devices that are compatible with all platforms and services.

4.13 These changes mean that similar sets of services are available on different platforms. The result of this convergence is increased choice for consumers. For example, broadband internet access can be obtained via cable, fixed wireless, satellite, or a fixed or mobile phone line. Platforms are becoming increasingly interchangeable, so that, over time, when consumers receive a service, many may not know which platform is being used.

4.14 Historically, platforms have been regulated in different ways and convergence is exposing the differences between the frameworks under which we regulate radio, TV, and fixed and mobile telecoms. This creates potential for the development of competition to be distorted, as stakeholders may invest in platforms with less restrictive regulatory regimes.

4.15 However, this does not mean that a simple platform-neutral approach is always desirable. For example, TV programmes can now be shown via a variety of platforms: broadcast in the traditional way; supplied on-demand via a fixed phone line; or streamed via the internet. These platforms are currently regulated in different ways: Ofcom regulates programmes which are broadcast; programmes supplied on-demand are subject to self-regulation; and the streaming of programmes via the internet is unregulated.

4.16 There may be legitimate reasons for these platforms to be regulated in different ways. For example, viewers have different expectations about the regulation which should apply, tending to believe that programmes which are broadcast should meet higher standards. We believe, therefore, that a platform-specific approach to content regulation may continue to have merit, at least for a significant transitional period.

4.17 Our ability to address inconsistencies in the way that platforms are regulated is constrained by the legislative framework, at both national and European level. For example, the regulation of VoIP services is determined to some extent by the rules set by the European Union.

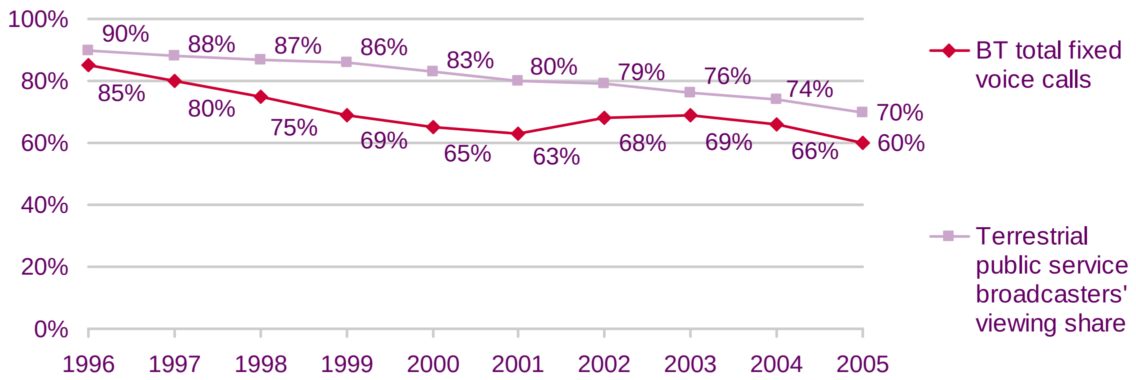
4.18 During the next three years, we will therefore need to consider:

- the extent to which it is desirable for platforms to be subject to different regulatory frameworks;
- the extent to which it is possible to have a more consistent approach to platform regulation within the current legislative framework; and
- in the longer term, at what point it would be useful to have a debate about how the legislative framework might need to change to enable a more consistent approach to regulation.

Pressure on traditional suppliers

4.19 Linked to the increasing competition between platforms is the fact that suppliers who have traditionally held a strong market position are increasingly being challenged. Their market shares and profit margins are falling in some areas. This is true of both telecoms and TV, as shown by figure 4.4.

Figure 4.4: The decline in market share of traditional suppliers



Source: Ofcom / operators, CMR 2006

4.20 To a large extent, increased competition reflects the success of regulation. For example, the broadband market is becoming increasingly competitive as regulation helps enable new players to enter the market and offer innovative services, often bundling broadband with other services such as fixed and mobile voice calls.

4.21 At the moment, most people would agree that a telephone is needed in order to be included in society. The objective of ensuring that everyone has access to a telephone is achieved by obliging BT to provide all homes with a fixed phone line, even where this is not economically viable. Similarly, most people would agree that public service programming, such as accurate and impartial news, should be widely available. This public outcome is achieved by placing obligations on TV and radio broadcasters, who, in return, are licensed to use scarce spectrum.

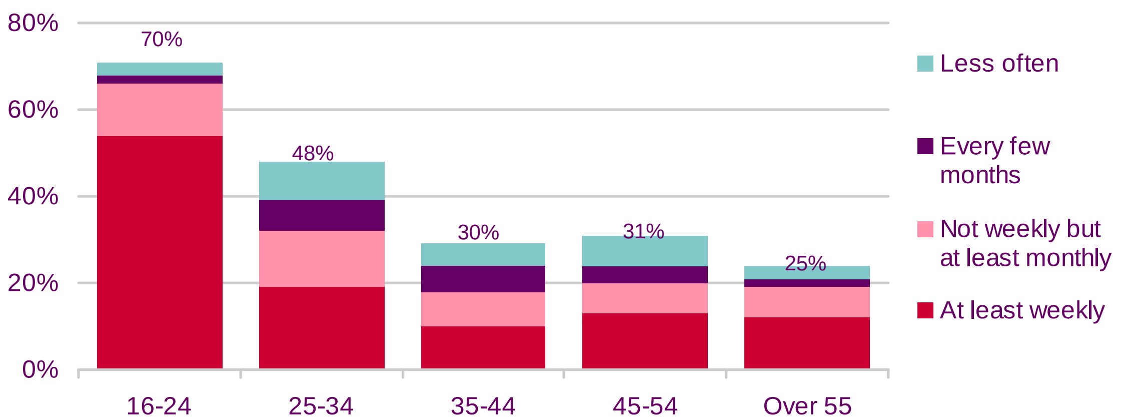
4.22 One of the consequences of increasing competition, however, is that it is harder for companies to fund these obligations. For example, companies only wish to rollout platforms where it will be profitable to do so. Historically, communications platforms, such as fixed phone lines or TV, were either available everywhere at a uniform price, or available nowhere. Increasingly platforms do not display these characteristics.

Evolving attitudes to communications services

4.23 At the same time, consumers are displaying increasingly different attitudes to services, and are using them in different ways. Figure 4.5 provides one example, showing how the use of social networking websites varies widely among different age groups.

4.24 Alongside this trend, what society expects of regulation is likely to change. Access to communications services will become a pre-requisite for participating fully in society. For example, doctors' appointments are likely to be made increasingly online. This is likely to lead to a demand for more communications services to be made available to everyone. In other words, there may be calls for more services to be regarded as 'public services'.

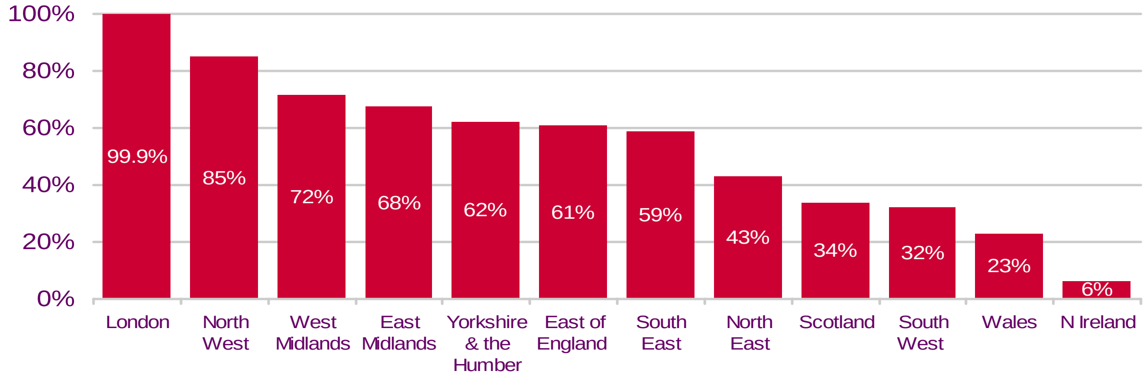
Figure 4.5: How often people use social networking websites to chat to, or regain contact with, people



Source: Ofcom research, Proportion of internet users 15+

4.25 Many new services, such as higher-speed broadband, are only available in certain parts of the UK, and the price of services can vary depending on location. For example, if broadband is only available via satellite, this is likely to be more expensive than receiving broadband from a supplier using Local Loop Unbundling (LLU). LLU involves suppliers putting their equipment into BT's local telephone exchange in order to provide broadband via fixed phone lines. For consumers, this means a greater choice of broadband services. Figure 4.6 shows that consumers' ability to take advantage of this increased choice varies considerably from region to region.

Figure 4.6: Percentage of premises connected to a LLU exchange



Source: Ofcom, operator data, 31 October 2006. Any non-BT LLU operator has at least 1 unbundled line in the exchange

4.26 This raises the question of the extent to which new platforms should be rolled out to areas where this would not be commercially viable and, if so, how this should be funded.

4.27 In relation to content, changing attitudes and behaviour mean that there may be a greater role for self-regulation, allowing the removal of formal regulation in some areas. In particular, as more people gain the tools and knowledge to control access to the content they view, society may decide that less formal regulation is needed to protect audiences from harm and offence. However, at least initially, self-regulation is likely to be regarded as more appropriate for some forms of content, such as content viewed on-demand, rather than others, such as programmes broadcast in the traditional way.

4.28 Another important consideration is that achieving positive public outcomes may not always require public intervention. Market developments may mean that some public outcomes can be achieved without regulation. For example, we are already seeing the emergence of local TV services, and telecoms access services for people with disabilities, such as software which enables a phone to read out text to someone who is visually impaired.

4.29 But increasing competition between platforms, combined with pressure on traditional suppliers and evolving attitudes to communications services, means that we will need to review:

- the key public outcomes that society will want in the future;
- which of these outcomes the market is likely to provide and which will require regulation; and
- how rapidly we should move to new or modified mechanisms for achieving key public outcomes, and how they should be funded.

Increasing complexity

4.30 In the past, only a few services were available – telephone, TV and radio – and there was a limited choice of suppliers. Consumers now benefit from a wide range of suppliers and have numerous services to choose from. There are also more tools available to help them protect themselves, rather than relying on uniform, formal regulation.

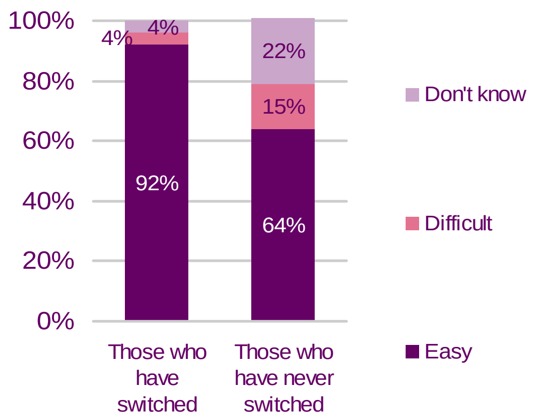
4.31 However, communications services are becoming more complex, and the rate at which services change is increasing. For example, when consumers choose a broadband service they need to take into account the download speed, upload speed, whether there is a cap on the amount of data which can be downloaded, and whether protection against viruses and spam is included.

4.32 Consumers are also grappling with new technology. Whereas making a phone call is easy for most people, the same cannot always be said of setting up a broadband connection or using a wireless router. Using today's communications services requires a higher level of communications capability, including media literacy. However, there are services to help consumers. For example, they can choose a broadband service with free technical support, or control access to TV content using PIN protection. But many consumers are not aware of the services on offer and need to acquire new knowledge and skills.

4.33 Increased complexity has four main potential consequences for consumers.

- It may become harder for them to make well-informed comparisons between services. As a result, markets may function less effectively.
- The process of switching from one service to another may become more complicated, particularly when services are sold as bundles. Figure 4.7 shows consumers' attitudes towards switching supplier and suggests that, of those who have switched, most feel fairly confident about taking advantage of competition. However, a significant proportion feels uncertain about the more complex environment they find themselves in.
- There may be an increasing number of scams which exploit consumers' unfamiliarity with new services.
- Consumers are concerned about protecting themselves against harmful or offensive content online (as opposed to TV), and will need to become more knowledgeable about how they can control access to content for themselves and their children.

Figure 4.7: Consumers' views on the ease of switching to another supplier



Source: Ofcom's Residential Tracker, Q2 2006

4.34 In response to these developments, Ofcom will need to examine:

- our role in ensuring consumers are empowered to address these challenges, and how much we should delegate to industry or other institutions;
- to what degree Ofcom will continue to need to protect consumers directly, and how we can ensure that enforcement is effective;
- the extent to which Ofcom should increase its activities to ensure that consumers have the information, tools and skills necessary to engage effectively in communications markets; and
- how actively Ofcom should facilitate a transition towards consumers taking more responsibility for protecting themselves against harmful and offensive content, allowing formal regulation to be reduced.

Challenges to traditional business models

4.35 There are increasing challenges to traditional business models. Many platform operators have enjoyed two decades of growth as a result of rising average revenues per user (ARPU) and increasing customer numbers. However, markets are now more competitive and ARPUs are under pressure.

4.36 Many of the successful new business models of the last five years have not involved platform ownership. Instead, they have involved providing services or supplying content, and have not required significant capital expenditure. Google developed a highly effective search engine funded by online advertising. YouTube enabled people to share and download video clips. Apple popularised the legal downloading of music through the development of iPods and the iTunes online music store. Skype made use of the internet for cheap voice calls.

4.37 However, the development of many new, innovative services depends on platform operators making substantial investments in their networks. Traditional telecoms networks are being replaced with IP networks and broadcasters are investing in High Definition TV. The challenge is to fund these platform upgrades when traditional business models are faced with increased competition. For example, investment in the UK in next generation access networks is currently lagging behind our major competitors.

4.38 Traditionally regulation has been targeted at platform operators with market power, and there remains a need to promote competition in telecoms and broadcasting markets. For example, work will continue to ensure that BT Group plc implements effectively the Undertakings designed to ensure that competitors have equivalent access to the wholesale products needed to supply services to consumers.

4.39 At the same time, we need to be aware that convergence may mean that new sources of market power emerge in areas such as navigation or digital rights management.

4.40 Increased competition does mean, however, that the amount of regulation can be reduced. For example, in response to increased competition we have lifted the restrictions on the prices which BT can charge for voice calls.

4.41 We therefore need to:

- examine what our approach to regulation should be as the economic power of platform operators diminishes in some markets, and the extent to which we can further reduce regulation;
- consider where sectoral regulation is sufficiently flexible to deal with markets that are changing rapidly, and where we should move towards using competition law more;
- explore how we balance the need for innovation and efficient investment with the need to continue protecting consumers and promoting competition;
- consider how we respond to any new barriers to competition which might arise as convergence develops; and
- take a more strategic view of certain wireless platforms, examining the implications for other platforms and considering the long-term implications for regulation.