



## Foreword from Patricia Hewitt, Secretary of State for Trade and Industry

Telecommunications is not a natural monopoly! To anyone buying telephony services today, that may seem a statement of the obvious. We are all bombarded with advertising literature inviting us to buy our phone services from a wide range of new suppliers offering competitive rates.

**N**o television advert break is complete without the latest advert from the mobile companies. And, of course, the Internet is essentially a creation of telecommunications technology.

But twenty years ago, none of this widespread choice was available. Mobiles were in their infancy and needed a special box to carry them in. And, for the domestic consumer, you could have any telephone company you wanted as long as it was BT. Though BT were not exactly famous for the speed at which they would install a line or repair the local phone box.

So the transformation of the UK's telecoms market from a single monopoly supplier to one with literally hundreds of service suppliers and much higher service standards has been dramatic. And it did not happen by itself.

Instead it happened by the creation of the UK's first independent sectoral regulator, namely OfTel. OfTel has been the key catalyst in creating today's telecoms market. Its work to introduce competition into the telecoms market has led to more choice, more innovation, lower prices and higher standards.

Whether it has been to open up markets to competition, taking action against anti-competitive practices, or helping consumers to choose from the wide range of services available to them, OfTel has been at the forefront of regulatory practices. Many of these have been adopted not only in Europe, but around the world. For example, the new EU communications directives stress the need for market reviews and appropriate regulation, an approach that OfTel has used for a number of years.

In the UK, the convergence of the telecoms and broadcasting markets means that the Government has created a new regulator, the Office of Communications, to regulate the whole communications industry. OfTel will join with the four other communications regulators to create Ofcom, which will be able to draw upon OfTel's immense experience, knowledge and skills of regulating a dynamic and fast-moving industry.

With the impending end of OfTel, this publication provides a unique record of its achievements over the past 20 years. An overview of OfTel's approach to regulation is

set out by Alan Bell, OfTel's Director of Strategy, who has worked under the four Director Generals and there are interviews with each of the Director Generals, who give fascinating personal insights into their work.

I have worked closely with the current Director General, David Edmonds, for much of the last five years and have seen at first hand the analysis and balance, and independence of mind, that imbues the work of OfTel.

Obviously, the main focus of the moment is not on looking back but looking forward. Ofcom will need to develop its own priorities and its own world view. But it will inherit a legacy from OfTel of rigorous economic thinking and analysis combined with an absolute focus on the interests of the consumer. This publication shows just how strong that legacy will be.

A handwritten signature in dark ink, appearing to read 'Patricia Hewitt', with a stylized flourish at the end.

# 1981

The BT Act splits BT from the Post Office and liberalises certain telecoms services

First phonecard launched for use in public call boxes



# Building a competitive telecoms market

by Alan Bell, Director of Strategy, Oftel

# Oftel



1980



1990



2000

1982

Of tel

Sale of BT and the creation of Of tel is announced by the Government

Of tel came into existence on 1 August 1984 and its inception was historic and important for several reasons. Not least was the fact that Of tel was the first sector specific regulator in the UK.

**B**T (British Telecommunications as it then was) was the first of the nationalised utilities to be privatised, with 50.1 per cent of BT's shares sold by the Government. Privatisation was the key element of the then Government's industrial policy and the BT privatisation set in train the privatisation of gas, electricity, water and railways.

The Government believed that privatisation would improve the efficiency of the utilities and of the economy as a whole, which depended on their services. It reduced the burden on public finances and encouraged much greater use of the capital markets to fund investments. Privatisation also freed the utilities from politically based decision making and gave them greater incentive to focus on meeting the needs of customers.

### Of tel's role

Whilst privatisation brought many benefits, BT's monopoly of telecoms services was unchanged. Of tel was therefore given significant new powers to ensure BT had a strong customer focus. At the time, almost a quarter of homes were not connected to the telephone network and installation times were measured in weeks rather than days as now.

An important principle of sector specific regulation was that it should be independent from government. Regulatory decisions should not be driven by a wider political agenda and so provide greater predictability for commercially risky decisions on long term investment, both by the incumbent and potential entrants. This was a new idea in 1984 but influenced the formation of other sectoral regulators and the Of tel model was copied extensively abroad, especially in Europe.

So Of tel's early days were associated with a number of novel economic and public policy initiatives which posed some significant challenges. From its inception, Of tel began to use its new sectoral powers to regulate the market and to establish an information base to underpin its actions.

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### First steps

An important feature linked to the establishment of Of tel was the price control introduced at that time – the now much used RPI-X formula designed to control the price of a basket of basic services. The important feature of this form of price control was that it overcame the difficulty of encouraging greater efficiency by monopoly providers. The RPI-X price control was used in all other privatisations and was copied across the world including the United States, with Of tel called upon to provide advice and information to fellow regulators on the use of this type of control.

A further novel feature associated with Of tel was the duty placed upon it by the 1984

Act to 'promote' competition. Conventional competition authorities are charged with protecting competition – not actively promoting it. Moreover, the economics of fixed network delivery are such that there are limited opportunities for competition at this level. But Of tel believed that where competition could be encouraged it should be and much subsequent activity has been directed to achieving competition, especially in the area of interconnection between different networks.

The early 1980s were a critical time for the telecommunications sector. Technological changes including electronic switching facilities and fibre optic cables significantly increased capacity.

Given the importance of telecommunications to the country in terms of general economic performance and social inclusiveness, it was important that this new technology was adopted quickly. The investment however was costly, involving billions of pounds over a number of years. This reinforced the Government's view to move ahead with the privatisation of BT quickly so that the substantial investment programme could be funded through the capital markets.

### Promoting competition

Government telecommunications policy was and continues to be based on the belief that wherever feasible, competition will meet the needs of consumers. Of tel's early focus was on infrastructure competition on the assumption that a choice of infrastructures would generate competition in service provision without regulation.



1983 First alternative telecoms service to BT is established by Mercury in the City of London



1984 Oftel is established and the Director General of Telecommunications is appointed to regulate the telecoms industry

Indeed, there was a specific condition in BT's licence to prevent other network providers from effectively reselling BT's network and wholesale interconnection could only be granted to other designated operators.

Early actions focused on interconnection, prevention of anti-competitive behaviour by BT, and supporting the early takeoff in the mobile market through the licensing of Vodafone and Cellnet (O<sub>2</sub> as now). Improving service quality was a key objective as in the early 1980s around six per cent of national calls failed to get through and the time to repair faults on customers' premises could run into weeks.

By the early 1990s, Mercury had established a high quality backbone network across England and provided significant competition to BT in international calls and for services to large business users, though BT still retained the vast majority of customers on its network. The success of Mercury persuaded the Government in 1991 to fully liberalise the UK market – an act copied across Europe some years later. Competition and choice began to develop, as highlighted in the later section on how consumers have benefited from Oftel's work.

With many new potential entrants wishing to provide services, especially through infrastructure investment, Oftel concentrated on meeting its duty to promote competition primarily through network competition. Oftel's work focused on interconnection to BT's ubiquitous network, policing of anti-competitive behaviour and removal of barriers to entry. Infrastructure competition mainly came from the cable companies who were originally licensed to provide television services, but since market liberalisation in 1991, also supplied telephony using the same infrastructure.

Key milestones in the mid-1990s were the introduction of number portability to allow easier switching by consumers between operators, taking over the management of

telephone numbers from BT, and perhaps most significantly, the development of a clear, practical framework for interconnection to allow new operators to start services.

Associated with this was the introduction for the first time of a system of accounting separation on BT to ensure fair, reasonable and non-discriminatory pricing of interconnection services to competitors. This model has now been widely adopted by many telecommunications regulators around the world. The interconnection arrangements also incorporated a wholesale price cap, again the first time this had been done anywhere in the world.

Although wholesale access to BT's network had been limited to other network operators, the distinction became increasingly blurred. For example, Oftel tackled BT's high profits in the international calls market by allowing wholesale terms to resellers, increasing competition and reducing prices.

By the end of the 1990s the UK had more infrastructure competition than almost any other developed country and more players in the mobile market. It also had a vibrant service provider sector, so much so that BT's own share in some retail markets was below that of some of its competitors.

Oftel's strategy was having an impact. In 2002, BT's share of voice calls had fallen to 60 per cent and its share of international call volumes was just 30 per cent. In the mobile market, the four main networks now all have broadly equal market shares.

Oftel's actions in pursuit of its duties achieved success with consumers getting a good deal in terms of lower prices and very high service quality from voice services. But the reach of infrastructure competition was not as great as expected in the early 1980s. The attraction of a potentially cheaper method of network construction using fixed radio based

technologies waned and the cost of connecting every UK household through cable was prohibitive. This meant BT's position in access remained dominant.

### Changing market conditions

The late 1990s saw a change in Oftel's overall regulatory stance away from the main focus on infrastructure competition and occurred for two basic reasons. Firstly, as mentioned, BT retained the only ubiquitous fixed network in the UK. Secondly, with telecoms infrastructure being so costly, the collapse of financial markets severely reduced access to capital, with a clear downward impact on new infrastructure investment.

Recent years have therefore seen a more balanced approach from Oftel to the promotion of competition at the infrastructure and service provision levels. The reduction of investment in infrastructure made it more attractive for operators to use more of BT's network, and so regulation has necessarily had to reflect the realities of the market place.

The advent of broadband brought new complications. Competing head-to-head with BT on basic voice became increasingly difficult as BT became more efficient. But broadband offers many opportunities for high value services and so operators turned their attention to providing their own services using parts of BT's broadband network, particularly in the absence of access to capital to fund new investment.

This presents dilemmas for Oftel: while it wants to see competition at all levels in the supply chain, how far should it encourage 'buy' (rather than build) decisions? Secondly, should it allow competitors to 'buy' new services from BT in which it has invested considerable resources? Would allowing access by others undermine BT's incentives to invest? This was much less of a concern in the 1980s when there was limited innovation.

1985



First cellular mobile services launched by Cellnet and Vodafone

0800 freephone services launched

These dilemmas were not envisaged 20 years ago. The expectation was that by this time competition would be pervasive and regulation would have faded away. To a large extent, the changing nature of regulation reflects market developments and the introduction of new technologies. Mobile phones have developed to become a 'must have' product, but are still largely a complement rather than a substitute for fixed services. The key technological developments to enable huge flows of data have mainly occurred on the fixed network and these developments have therefore reinforced the position of fixed network operators.

So at a time of capital shortage and when the early expectations of broadband have not yet been achieved, competition has developed through the more accessible, less costly level of service provision. Recognising the difficulty of encouraging further infrastructure competition, Oftel's focus has moved more to service level competition through the provision of broadband interconnection, carrier pre-selection and wholesale line rental products.

What current regulatory activity reveals is the power and ubiquity of BT's network even 20 years after privatisation and the challenge of building alternatives. Oftel's strategy to promote competition started in the early 1980s and still remains in place. There are a growing number of players at the different levels of the supply chain, but regulation is still necessary at all levels to deliver competition.

Finally, a major change from 1984 is that telecoms is now regulated almost entirely under EU Directives – very few directives existed in the early 1980s. This has not proved a major change for Oftel: much of the substance of the directives reflects Oftel's regulatory practice and process developed over the years, which is perhaps a compliment to the effectiveness of its work.

## Competition regulation

Growing competition means that Oftel can increasingly act as a competition authority, rather than as a sector regulator. A key area in Oftel's evolution has been the use of its parallel Competition Act powers, rather than special sector specific powers vested in it at its inception. Oftel uses its Competition Act powers where it is feasible to do so.

The UK telecoms market has changed immensely over the past 20 years, and Oftel can take much credit for this.

The Competition Act puts responsibility on operators to abide by competition law, or face large fines if they are found to have broken the law. As competition increases, it is likely that Oftel, and from next year Ofcom, will increasingly rely upon the Competition Act to police the telecoms sector.

However, Oftel is not in danger of losing all sectoral powers. Oftel has powers to intervene in the telecoms market under EU Directives. New directives come into force in July 2003, and Oftel's approach to regulation is already very much in tune with the directives – promoting competition, analysis of competition through market reviews, and withdrawing from regulation where competition is effective. These directives can therefore be seen as support for Oftel's approach to regulation.

## Conclusion

The UK telecoms market has changed immensely over the past 20 years, and Oftel can take much credit for this.

The job of a regulator is not easy. Regulation has an impact on the market – indeed that is the purpose of it. The trick is to introduce targeted regulation that addresses a specific problem, without skewing the market to the detriment of consumers and operators.

Market developments result in new problems and challenges, and Oftel has had to tackle them through creating innovative regulatory solutions. It is a measure of Oftel's success that its approach has been copied around the world by other regulators.

Tackling barriers to entry, setting price controls where competition is insufficient, protecting consumers that may not be served by the market, and withdrawing from sector specific regulation where competition has increased are now all widely used, standard regulatory practices. Oftel's strategy of promoting competition remains but the focus has shifted from exclusive reliance on infrastructure competition.

When it takes over as regulator in December 2003, Ofcom will face new challenges, not least because it will be regulating the whole communications sector, not just telecoms. However, Ofcom will be able to draw upon the valuable lessons provided by Oftel's approach to regulation and the successes this has achieved for consumers.