



**Telecommunications privatisations and their  
impact on the market, competition and the  
universal service obligation**

**A report by  
Europe Economics**

**Europe Economics  
Chancery House  
53-64 Chancery Lane  
London WC2A 1QU  
Tel: (+44) (0) 20 7831 4717  
Fax: (+44) (0) 20 7831 4515  
[www.europe-economics.com](http://www.europe-economics.com)**

**22 August 2007**

## TABLE OF CONTENTS

<b>1</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>3</b>
	Background .....	3
	Summary of Findings and Conclusions .....	3
<b>2</b>	<b>BACKGROUND .....</b>	<b>6</b>
	Project Objectives .....	6
	Europe Economics.....	7
<b>3</b>	<b>DEVELOPMENT OF TELECOMS MARKETS .....</b>	<b>8</b>
	Introduction.....	8
	Recent Market Developments .....	10
	Future Market Developments.....	12
<b>4</b>	<b>PRIVATISATION ACTIVITIES IN TELECOMS MARKETS .....</b>	<b>16</b>
	Purpose of Privatisation.....	16
	Implementation of Privatisation.....	17
	Privatisation Issues.....	18
<b>5</b>	<b>IMPACT OF PRIVATISATIONS ON MARKETS.....</b>	<b>23</b>
	Liberalisation and Competition .....	23
	Employment and Efficiency .....	24
<b>6</b>	<b>IMPACT OF PRIVATISATIONS ON USO.....</b>	<b>27</b>
	Universal Service Obligations .....	27
	Impact of Privatisations .....	28
<b>7</b>	<b>CONCLUSIONS.....</b>	<b>34</b>

# 1 EXECUTIVE SUMMARY

## Background

- 1.1 This report has been prepared at the request of the Swiss Federal Office of Communications (BAKOM), the Swiss Finance Administration (EFV) and the Federal Department of Environment, Transport, Energy and Communications (UVEK) which sought consultancy support to examine foreign experiences in privatisation matters, the influence of privatisation on the market and competitive situation in the telecommunications sector, and the fulfilment of universal service obligations by privatised entities.
- 1.2 The objectives of the report are to provide:
- (a) A brief review of the future development of the telecommunications market, taking into account any likely changes in financial Government involvement in incumbents in developed countries;
  - (b) Description of current shareholder structures of incumbents and any foreseeable changes in EU15, Norway and other relevant countries;
  - (c) Detailed data descriptions of incumbents by shareholding type;
  - (d) Description of experiences and observations with regard to telecoms privatisations in developed countries, with special emphasis on EU15 and the involvement of the European Commission;
  - (e) Observed influence of a change in shareholder structure with regard to market/competitive situation;
  - (f) Observed influence of a change in shareholder structure with regard to fulfilment of universal service obligations; and
  - (g) Conclusions and recommendations.

## Summary of Findings and Conclusions

- 1.3 Privatisation of the previously Government owned telecoms provider has been a key feature of the recent development of telecoms markets. There are a range of different motives for privatisation, including:
- (a) Revenue generation;
  - (b) Improving the efficiency of the incumbent provider;
  - (c) Releasing the incumbent provider from any restrictions imposed by public ownership;

- (d) Improving the prospects for the incumbent provider to attract additional private investment funding; and
  - (e) A demonstration to potential new market entrants of the independence of the Government.
- 1.4 Often, a Government's goals for privatisation will encompass a number of interlinked motives, along with its own party political beliefs.
- 1.5 Nevertheless, in many of the countries reviewed in this study, privatisation has been an integral part of the move to liberalise the telecoms market and to introduce effective competition. The important benefits that a Government seeks to gain from privatisation are typically that privatisation will:
  - (a) Help to prepare the incumbent provider for the challenges for the newly liberalised and competitive market; and
  - (b) Signal to potential new entrants that the Government will be fair and even-handed to all market players.
- 1.6 Nearly all of the countries reviewed in this study had undertaken some degree of privatisation for their incumbent telecoms provider. Countries used both trade sales and IPOs to implement privatisation, with trade sales being used primarily to partner with a more experienced international telecoms provider and to assist the evolution to a more commercial approach for the incumbent company.
- 1.7 While concerns were expressed in a number of countries about a possible loss of national identity following privatisation, we found no indication that having a significant proportion of foreign shareholders had any real strategic or operational impact.
- 1.8 Many countries introduced safeguards into the privatisation process, through the inclusion in legislation of minimum levels of Government ownership or the holding of "golden shares". We found no evidence that such golden shares had ever been formally exercised in the countries reviewed in detail for this study and most countries have now given up these safeguards. However, there are exceptions with Portugal continuing to retain its golden share and with the New Zealand Government appearing to exercise its "Kiwi share" in respect of its USO requirements.
- 1.9 Assessing the impact of privatisation in isolation to the effects of liberalisation is very difficult. However, from the analysis that we have performed, we would observe the following:
  - (a) The consumer benefits that arise from enhanced competition and lower prices should generally be attributed to the effects of liberalisation rather than privatisation;
  - (b) The most critical factor affecting market development and competition is the

effectiveness of the regulatory regime; while privatisation is relevant to this consideration, it is not the most significant issue; and

- (c) Privatisation most obviously impacts on the relative efficiency of the incumbent telecoms provider, allowing it to streamline its operations and to compete more effectively in the liberalised market.

- 1.10 When we reviewed the provision of the USO by incumbent telecoms providers, we found no clear evidence that the fulfilment of universal service obligations is either beneficially or adversely affected by privatisation. We believe it is more likely that the critical factor in the fulfilment of the USO is the effective operation and enforcement capabilities of the national regulatory authority for telecoms.
- 1.11 Finally, we would suggest that, if a Government is particularly concerned about the loss of effective Government influence as a result of a move to full privatisation of the incumbent telecoms provider, it should consider the example of New Zealand and its “Kiwi share” as a possible means of striking the optimal balance between the benefits offered by privatisation and the need to manage the political and social concerns surrounding complete privatisation of the incumbent operator.

## 2 BACKGROUND

- 2.1 This report has been prepared at the request of the Swiss Finance Administration (EFV) and the Federal Department of Environment, Transport, Energy and Communications (UVEK), along with the Swiss Federal Office of Communications (BAKOM). These Ministries sought consultancy support to examine foreign experiences in privatisation matters, the influence of privatisation on the market and competitive situation in the telecommunications sector, and the fulfilment of universal service obligations by privatised entities.
- 2.2 Under the Swiss Telecommunications Enterprise Act, the majority of shares in Swisscom, the incumbent provider of basic telecoms services in Switzerland, must be held by the Federal Government. Swisscom was partly privatised following an IPO in 1998 and, at the current time, the Swiss Government owns a share of just under 55% in Swisscom.
- 2.3 In 2006, the Swiss Government prepared an amendment to the Telecommunications Enterprise Act which would have removed the legal obligation for the Government to maintain its majority shareholding in Swisscom. As part of the consultation process for this proposed amendment, the Government had received legal opinion from the Federal Office of Justice that there would be no constitutional obstacle to such a change but the Government wished also to consider issues such as ensuring the provision of basic telecoms services and the preservation of Swisscom's independence. The Government therefore considered during the consultation process the introduction of a number of additional safeguard measures, such as the designation of Swisscom as the universal service provider, retention by the Government of a golden share in Swisscom, and the introduction of other oversight rights. However, the Government found none of these additional measures to be appropriate and they were not included within the final proposed draft law.
- 2.4 However, this draft law was not passed amid a range of concerns about the impact of privatisation, notably in respect of the future fulfilment of universal service obligations. In 2007, the Swiss Parliament asked the Government to provide a comprehensive report considering different issues in relation to the privatisation of Swisscom. This report is likely to be an input to those considerations, in particular to compare the experience of EU and other developed countries in terms of privatisation and the impact of privatisation on their telecoms markets, including the fulfilment of the USO.
- 2.5 In June 2007, the Communication Commission (ComCom), the competent regulatory authority, designated Swisscom AG as future Universal Service Provider. Swisscom AG is thereby obliged to provide universal services nationwide for the period 2008 to 2017.

### Project Objectives

- 2.6 Therefore, the objectives of this report are to provide:

- (a) A brief review of the future development of the telecommunications market, taking into account any likely changes in financial Government involvement in incumbents in developed countries;
  - (b) Description of current shareholder structures of incumbents and any foreseeable changes in EU15, Norway and other relevant countries;
  - (c) Detailed data descriptions of incumbents by shareholding type;
  - (d) Description of experiences and observations with regard to telecoms privatisations in developed countries, with special emphasis on EU15 and the involvement of the European Commission;
  - (e) Observed influence of a change in shareholder structure with regard to market/competitive situation;
  - (f) Observed influence of a change in shareholder structure with regard to fulfilment of universal service obligations; and
  - (g) Conclusions and recommendations.
- 2.7 This report is structured in line with these objectives, with detailed country reports for each of the EU15 countries and Norway set out in the Appendices.

## **Europe Economics**

- 2.8 Europe Economics is an independent economics consultancy, specialising in economic regulation, competition policy and the application of economics to public policy and business issues. The firm advises a wide range of clients including government departments, regulators, international bodies, law firms and private sector companies. It is especially experienced in network industries generally and in the communications sector particularly.
- 2.9 More details of the firm can be found at [www.europe-economics.com](http://www.europe-economics.com).

### **3 DEVELOPMENT OF TELECOMS MARKETS**

- 3.1 This section of the report considers the general development of telecoms markets in the recent past and looking forward to the near future, with the intention of placing into context the main discussion in this report of the impact of privatisations on market development and universal service provision.

#### **Introduction**

- 3.2 Modern telecoms liberalisation is considered to have begun in North America. In the USA and Canada, there was no history of large Government-owned telephone monopolies. In the US, AT&T dominated the market until 1984 when it was broken up into a long distance and manufacturing company (AT&T) and seven regional Bell operating companies that offered local services. Prior to 1984, the only real area of competition had been for long distance calls, an area of the market that had been opened up to competition in the 1970s but in which competition became significantly more intense after the 1984 divestiture.
- 3.3 In Europe, telecommunications was traditionally treated as a public utility service, commonly associated with postal and telegraph services, and provided by the same publicly owned Government organisation. However, since the 1980s, there have been significant pressures for reform in the telecommunications sector, leading to substantial changes in markets throughout Europe and around the world.
- 3.4 These changes have arisen largely as countries have reacted to technological innovations and the need to attract financial investment for sector development. In many developing countries, the lack of a strong telecoms infrastructure is seen as a key disadvantage in the future development of the economy but the massive investments needed to install a modern telecoms infrastructure require the injection of new private capital. In developed economies, the encouragement of innovation and increased international trade has pushed telecoms liberalisation into the forefront of new political and economic thinking that encourages market entry and competition as the means to generate new investment and to reduce Government involvement in the provision of public services.
- 3.5 One can therefore observe two broadly distinct patterns to the changes in the structure of telecoms provision:
- (a) The sale of the national telephone network as a means both of gaining revenue for the Government and of achieving improvements to the national telecoms infrastructure (on the assumption that the private investor will have greater access



to funds for such improvements<sup>1</sup>); and

(b) The privatisation of the Government owned provider of telecoms services as an adjunct to a process of market liberalisation, both as a means to demonstrate Government impartiality (and thereby to attract more new entrants and more private investment) and as a means to facilitate the transformation of the incumbent operator into a more efficient commercially oriented competitor in the newly liberalised market.

3.6 There is clearly a tension between these two approaches in that, in the first case, the desire to maximise revenue has often led to the granting to the purchaser of a period of exclusive supply. In contrast, the whole purpose of market liberalisation is to break down the traditional paradigm of the exclusive monopoly supply of telecoms services. However, in both cases, the privatisation of the incumbent provider should lead to a more commercial outlook for the organisation with impacts on efficiency and staffing, a possible loss of national identity, and a change of focus onto profitability and away from notions of public service.

### **European Union**

3.7 In the European context, privatisation activity has fallen more into the second set of circumstances, ie. it has been associated with market liberalisation. While some countries adopted an early proactive stance towards market liberalisation, eg. the UK, a co-ordinated European approach to market liberalisation was first initiated in the period 1988 to 1990 with the issuing of a number of European Commission Directives which removed special or exclusive rights granted to telecoms providers, thus effectively prohibiting exclusive supply and opening up the telecoms markets to new entrants.

3.8 In 1990, the Commission established the principle of “Open Network Provision” (ONP), which put in place detailed harmonised rules to facilitate market entry and to prevent the distortion of competition. In 1996, Commission Directive 96/19/EC obliged EU Member States to open up their telecoms markets to competition by 1 January 1998. At the same time, the ONP rules were further adapted to form the “1998 regulatory package” which was designed primarily to manage the transition from monopoly to competition and was therefore focused on the creation of a competitive market and the rights of new entrants. Since 1998, the EU’s regulatory framework for the telecoms market has been reviewed and revised extensively but is still very much centred around the concept of a liberalised and competitive marketplace.

---

<sup>1</sup> This assumption may not always be correct as, in some cases, the factor of Government control may enable the company to obtain funds at favourable rates and to access additional credit facilities.

- 3.9 Nevertheless, while market liberalisation has been mandated within the EU, there has been no similar obligation to privatise the incumbent network operator in EU Member States.<sup>2</sup> Therefore, the process and rate of privatisation within each Member State has been very varied, and privatisation has taken place before, during and, in some cases, after the market liberalisation process. In a number of EU Member States, the privatisation process is not yet complete and the Government continues to hold an ownership stake in the incumbent telecoms operator.
- 3.10 None of the major European countries have followed the US example of the structural separation of the incumbent telecoms provider at the time of market liberalisation. Generally, such structural separation was seen as too damaging to the future success of the incumbent in sustaining a competitive market position after liberalisation.

## **WTO**

- 3.11 Outside the EU, market liberalisation has also for some time been widely recognised as a desirable goal. In 1995, Renato Ruggiero, the WTO Director General, stated that the next great challenge facing Governments was the liberalisation of trade in telecommunications.<sup>3</sup> Ruggiero noted that the dominant role of public monopolies in basic telecoms added “a special dimension of political difficulty” to the opening up of these services to competitive supply but asserted that “liberalisation of telecommunications should be seen as a way of promoting universal service, not as an obstacle to it”.
- 3.12 However, as in the EU, the WTO makes no comment about the need for any privatisation activity in relation to telecoms liberalisation and the WTO Reference Paper does not discuss privatisation (although it does note the need for competitive safeguards for new entrants and the need for an independent regulatory authority separate from any supplier of basic telecoms services).<sup>4</sup>

## **Recent Market Developments**

- 3.13 As discussed above, in the 1980s and 1990s, the main feature of telecoms markets in the developed world was the move to liberalised competitive markets, often accompanied by the privatisation of the incumbent telecoms provider. New market entry and competition tended to flourish most strongly in two areas: international calls and the growing mobile market.
- 3.14 The impact of competition for international calling was felt largely in lower prices for

---

<sup>2</sup> The members of the European Economic Area (Norway, Iceland and Liechtenstein) also agree to be bound by EU rules and implement them into their national legislation.

<sup>3</sup> Renato Ruggiero, Director General of WTO, speech at Telecom 95 in Geneva on 3 October 1995, WTO Press Release

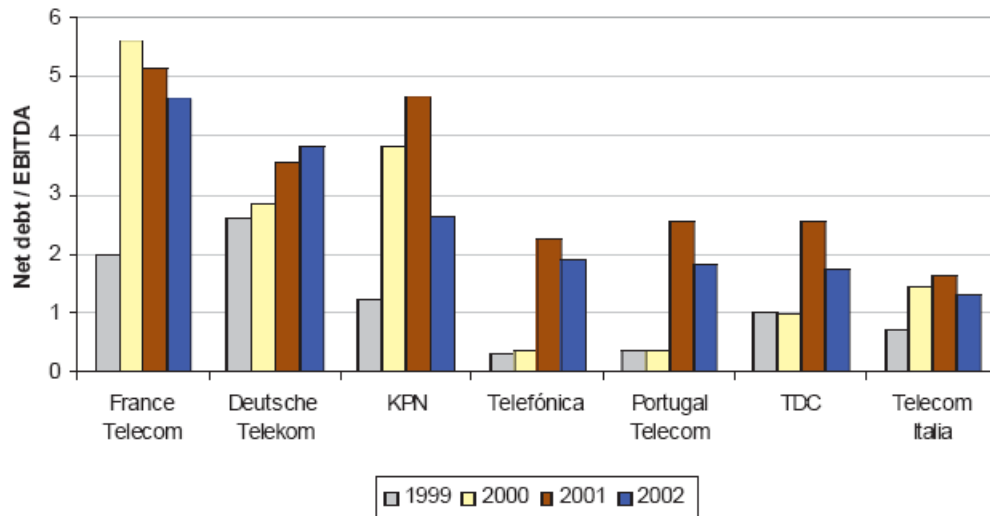
<sup>4</sup> WTO Telecommunications Reference Paper, Annex to the Fourth Protocol to the GATS Agreement, “The Agreement on Basic Telecommunications”, negotiated under the auspices of the WTO in February 1997

consumers. Network operators had for many years enjoyed high margins on international calls and the advent of indirect access, carrier pre-selection, and international resale services very quickly cut into those high margins. As a result, call prices fell rapidly.

3.15 However, the impact of the growing mobile market was very much more significant. Before the mid 1990s, mobile services were relatively expensive and were used only by a small minority of consumers, generally senior business executives and the very wealthy. The development of the global (originally European) GSM system generated a massive change to this industry. As the available audience for standardised GSM mobiles was now much larger, unit costs for equipment fell, allowing the development of cheaper and smaller handsets. Common standards and the allocation of common radio spectrum for GSM also permitted cross-border roaming. The introduction of pre-paid “subscriptions” was the final critical step in opening up the mass market for mobile telecoms services. In less than ten years, what had been a marginal product had now created one of the largest industries in the world.

3.16 Unfortunately, the mobile industry boom was to contribute to a financial crash which affected nearly all of the major telecoms companies in the period 1999 to 2001. This crash was generated largely by the collapse of the internet “bubble” but was greatly accentuated by the desire of all major telecoms players to acquire mobile 3G (or UMTS) licences, many of which were being auctioned in Europe in 1999-2000 at the height of the boom. As a result, the major telecoms companies paid very high prices for these mobile licences. Very shortly afterwards, the value of these licences and of the telecoms companies themselves were significantly downgraded, leaving most of the major telecoms companies in Europe massively in debt (see Table 3.1 below).

**Table 3.1: Net debt/EBITDA ratio of European incumbent operators in 1999-2002**



Source: IDATE based on company data

- 3.17 These huge debts and a general loss in confidence in the sector led to a period of retrenchment in the industry. Telecoms companies were forced to change their focus from expansion to the maximisation of profitability and the introduction of stringent cost reduction programmes. Employee numbers were reduced significantly in many cases, investment was cut, and major organisational changes took place, including divestment and outsourcing.

### **Development of Broadband**

- 3.18 In the fixed line world, incumbent operators had relied upon the same legacy networks to provide telephony and data services for many years. Even when the internet became a significant factor, the development of xDSL technologies allowed the incumbent operators to offer internet access using the traditional twisted copper pair, and without a total reconfiguration of the existing infrastructure support.
- 3.19 Regulators quickly recognised the importance of the new market for fast internet access and sought to introduce new wholesale opportunities for competitive providers of access. Where such wholesale access has been effectively introduced, consumers have enjoyed lower prices and more choice because of the growing competition, especially where local loop unbundling has been implemented effectively. However, in general, most incumbent operators continue to maintain a very high market share of retail and wholesale traffic in the fixed market.

### **Future Market Developments**

- 3.20 In the near future, there are some real prospects for significant change. Some key technological developments are highlighted below:
- (a) As the demand for higher bandwidth continues to grow, continued reliance on the traditional copper pair might no longer be sufficient. Critically, if, at some point there is a requirement for new local access infrastructure to be developed (such as fibre to the home), the first-mover advantage enjoyed by the traditional incumbents could be removed.
  - (b) The growing use of IP and packet-switched technologies renders the traditional commercial structure of telephony services redundant. It will no longer be viable to charge for calls on a per minute basis or even to charge separately for calls at all.
  - (c) Platforms are becoming more and more integrated and convergence seems, finally, to be a real working, prospect. Convergence will mean a coming together of previously separate communications and entertainment services: fixed and mobile telephony, broadband internet access and television. A single core network may have a variety of devices connected to it via different technologies: “one network, many services, any access”. Such a converged, all-IP network should cost less to run as it has a far simpler architecture and enjoys

considerable economies of scale. Secondly, it should be much easier and quicker to add new services.

(d) This concept of a converged network finds its technical reality in the “Next Generation Network” (NGN). The migration from current circuit-switched networks to an equivalent NGN will imply the following:

- Gradual substitution of circuit switches with packet ones (ethernet switches and IP routers);
- Introduction of equipment that will be able to handle the migration of traffic from one protocol to another (i.e. media gateways and softswitches);
- Scrapping of transmission electronic equipment not needed in an NGN (optical fibre cable will continue to be used as the major means of transport of all traffic); and
- Simplification of network and service management platforms.

(e) Mobility will also continue to be a key theme. New technologies offering portability and mobility will emerge to supplement and potentially to replace WiFi (and perhaps other existing mobile technologies). These include: WiMAX (which potentially offers mobile broadband services with handover or which could be used as an alternative wireless local access system); HSDPA (a means to increase the data capacity of mobile 3G systems); and potential new mobile 4G systems.

3.21 The impact of these technological changes will affect the structure and approach of the telecoms network and service providers. Companies that used to be in separate industries, such as telephone operators, internet service providers and cable TV companies, will find that they are now competitors. This development is behind the current trend for providers to offer “quadruple play”, the name given to the combined offering of fixed and mobile telephony, broadband internet access and multichannel television. Companies without expertise in one of the key services will need to obtain it through acquisition or partnership agreements.

3.22 The benefits of such a combined offering should be in convenience and lower prices for consumers, and reductions in costs for operators. However, the initial costs of developing and delivering this combined offering for consumers could be very significant, requiring new core network infrastructure (the NGN) and potentially new access infrastructure. The move towards the future development of NGN networks seems irresistible, given the service and operational cost benefits that such networks should offer for network operators and ultimately for consumers. However, the move to NGN also has the potential to be highly disruptive to the current market, giving rise to two major issues:

- (a) The ability of operators to fund these investments, in particular how the need for such funding will impact on future privatisation activity and on future levels of indebtedness; and
  - (b) The risk that inappropriate regulation could adversely impact the competitive market, either by disincentivising NGN investment or by losing the competitive momentum if appropriate levels of network access are not maintained.
- 3.23 Already, there is evidence that market players are lobbying for their preferred regulatory approach to NGN, with a senior executive at Telecom Italia having argued that “such an ambitious investment plan needs a clear regulatory framework that ... is not there yet”. Similarly, the Chief Executive of Telstra, the Australian incumbent, has argued against USO regulations which require Telstra to continue to provide rural telephone services across a country with the world’s sixth largest landmass but only the 52<sup>nd</sup> largest population.
- 3.24 In summary, the future of the telecoms industry seems to demand very significant investments from the operators in order to deliver high bandwidth broadband access both to fixed premises and for mobile users. In this context, the challenge for regulators is to ensure that the benefits delivered to consumers from market liberalisation and competition are maintained, while not disincentivising the required future infrastructure investment.
- 3.25 The challenge for Governments is to provide suitable conditions so that the necessary level of investment will flow to network providers to allow them to develop the new communications infrastructures, and to ensure that the benefits of high bandwidth broadband access are as widely available as possible. Essentially, these are the same challenges that led Governments in the 1980s and 1990s to consider carefully their policies on privatisation and on USO.
- 3.26 In respect of the USO, the technological changes described above are likely to have the following impacts:
- (a) The growing importance of fast internet connections will increase the pressure on Governments to ensure that consumers have a reasonable level of access to broadband at a reasonable price everywhere in the country, raising the question whether the definition of USO should be expanded to include broadband access;
  - (b) The increasing importance and capabilities of mobile technologies will potentially allow the fulfilment of universal service obligations using a variety of different technologies and not simply by means of standard fixed line connections;
  - (c) The requirement for public payphones to continue to be included as a specific element of the USO will reduce in importance as mobile phones become ubiquitous; and

(d) Growing levels of competition could suggest that a competitive market may develop to be selected as the universal service provider.

3.27 For Governments, perhaps the most critical question will be how to ensure that broadband access is provided as rapidly and as widely as possible so that it is available to all users, avoiding any social exclusion and maintaining (or improving) the country's competitive position. Addressing this question will involve a careful consideration of the advantages and disadvantages of intervention in the telecoms market, with the impacts that may result on the incentives for additional private investment, the speed and flexibility of the industry to develop and take advantage of new technologies and interventions, and the effective delivery of services to consumers.

## **4 PRIVATISATION ACTIVITIES IN TELECOMS MARKETS**

4.1 In this section of the report, we summarise and analyse the privatisation activities in the telecoms markets reviewed during this study, in particular focusing on the EU15 countries and Norway but also including observations from other countries where these highlight a particularly notable issue.

### **Purpose of Privatisation**

4.2 In reviewing the privatisation activities undertaken in the countries studied for this report, we found that there may be a number of different aims for a Government to consider when weighing up the possibility of privatising the incumbent provider of telecoms services. These include:

- (a) Revenue generation to support other public needs or services;
- (b) Improving the efficiency of the incumbent provider by instilling a more commercial ownership and management;
- (c) Releasing the incumbent provider from any restrictions that public ownership may entail, for example, the freedom to invest significantly in overseas activities;
- (d) Improving the prospects for the incumbent provider to attract additional private investment funding to develop its infrastructure and services; and
- (e) A demonstration to potential new market entrants of the independence of the Government from the major player in the telecoms market and thereby of the Government's commitment to a fair playing field for competition.

4.3 In some countries, the aim of the privatisation activity was very focused but, in most cases, we found that there were a number of linked goals for privatisation. For instance, while the Danish Government stressed that privatisation would facilitate TDC's ability to establish an international presence, it also took into account a range of other factors, such as the likelihood that privatisation would generate commercial efficiencies. On the other hand, it seems clear that the privatisation of OTE in Greece was mainly undertaken to generate funds for the State.

4.4 In addition, we found that studying the context of the privatisation activities often revealed that the privatisation of the incumbent telecoms provider was linked to a wider political agenda, which used this particular privatisation as a means to implement and demonstrate the political value of issues such as:

- (a) Reducing the influence of the State in commercial activities and public services;
- (b) Reversing the decisions of previous Governments, eg. to nationalise organisations delivering public services; and



- (c) Encouraging private citizens to become shareholders.
- 4.5 The privatisation of telecoms incumbents in the UK (in the Thatcher era), Austria, Portugal and in Spain are particularly clear examples where this wider political imperative can be seen to be strongly influential.

## **Implementation of Privatisation**

- 4.6 In terms of the implementation of privatisation, the following activities may take place:
- (a) “Corporatisation” of the incumbent – in this preliminary phase, the public sector administration or organisation providing telecoms services is transformed into a private sector company with its own separate management structure;
  - (b) Initial public offering (IPO) – whereby shares in the company are offered to the public through a public market, such as a stock exchange or bourse; and
  - (c) Trade sale – whereby shares in the company are sold privately, either to other providers of telecoms services or to corporate investors (such as insurance companies, banks or private equity companies).
- 4.7 Nearly all of the countries studied for this report have implemented the corporatisation and privatisation of their incumbent telecoms providers – see Table 4.1 below.
- 4.8 Only Luxembourg has not taken any steps to privatise its incumbent telecoms provider. Of the remaining 15 countries, six have implemented full privatisation, while only two Governments retain a majority stake in the incumbent. The most common approach therefore is for countries to have implemented privatisation to a significant degree but nevertheless to retain a significant minority stake in the incumbent telecoms provider. These retained stakes are all at a level which allows the Government to continue to exercise a degree of “blocking” control over the incumbent telecoms provider in respect of important corporate decisions, including special resolutions.<sup>5</sup>

---

<sup>5</sup> The level of the threshold share ownership level which grants such blocking powers varies between different countries, being variously 20%, 25% and 33%.

**Table 4.1: Privatisation status in EU15 and Norway<sup>6</sup>**

Country	PTT	Privatisation Status	Government stake
Austria	Telekom Austria	Government minority stake	27.37%
Belgium	Belgacom	Government majority stake	50%
Denmark	TDC	Fully privatised	nil
Finland	TeliaSonera	Government minority stake*	13.7%
France	France Telecom	Government minority stake	27%
Germany	DT	Government minority stake	31.7%
Greece	OTE	Government minority stake	38.7%
Ireland	Eircom	Fully privatised	nil
Italy	Telecom Italia	Fully privatised	nil
Luxembourg	EPT	State owned	100%
Netherlands	KPN	Fully privatised	nil
Norway	Telenor	Government majority stake	54%
Portugal	PT	Government minority stake	0.01%
Spain	Telefonica	Fully privatised	Nil
Sweden	TeliaSonera	Government minority stake*	45.3%
UK	BT	Fully privatised	Nil

\* Together, the Governments of Finland and Sweden hold a majority stake in TeliaSonera

4.9 In the case of Portugal, although the minority stake held by the Government is exceptionally small, the shares held have a special status, which grants the Government the right to appoint one third of the Board of the incumbent telecoms provider and to veto important decisions. The holding of these so-called “golden shares” by the Portuguese Government are being challenged by the European Commission in infringement proceedings on the basis that they restrict intra-EU investment (see further discussion of this issue below).

4.10 In the case of TeliaSonera, while the Finnish Government holds only a small stake in the company, this stake, together with that of the Swedish Government, constitutes a majority share in TeliaSonera.

## Privatisation Issues

### Implementation

4.11 In most countries, privatisation of the incumbent telecoms operator has taken place

<sup>6</sup> The ownership information in this table is the latest currently available, ie. as at end July 2007

gradually in a series of phases. Many Governments have used this phasing approach to test the impact of privatising the incumbent operator and to avoid difficult or embarrassing public policy concerns from arising. Governments would also have had to consider the capacity of the financial markets to be able to absorb a large IPO, ie. this might also necessitate a phased approach. In six of the countries studied, the percentage of shares sold in the initial privatisation phase was less than 30%, and in only three countries was a stake greater than 50% sold in the first phase.

- 4.12 IPOs were the most common means of privatising the incumbent, with some form of public share offering being used in at least one phase of every privatisation studied. Trade sales have been used less often. In Austria, Belgium and Ireland, trade sales were made in the initial phase of privatisation, in each case, with the main purpose of ensuring that the newly privatised company could gain from the expertise of a larger more internationally experienced telecoms operating partner. In Denmark, the trade sale came in the second phase of privatisation and signalled the move only one year later to the transformation of TDC to a fully privatised company.
- 4.13 We found no particular evidence or indicators to suggest that any specific approach to the privatisation of an incumbent operator was more likely to be successful than another. Indeed, the evidence we found indicated that there were often different circumstances and reasons for each of the different stages of privatisation in each country. At one stage, the main rationale might be to add some commercial expertise to help prepare the incumbent for the forthcoming liberalisation of the market, at another stage, the main emphasis might be to generate funds for the State, at another, to make a political point about the desirability of private share ownership.

### **National Identity**

- 4.14 In a number of countries, concerns were expressed about a loss of national identity following the privatisation of the incumbent telecoms operator, with the risk that this would entail future ownership by shareholders or corporations from overseas. In Austria, for example, the legislation under which the privatisation of Telekom Austria has taken place explicitly lists a number of conditions for privatisation which are designed to ensure that there is no significant loss of national identity. In other countries outside Europe, there may also be rules preventing the foreign ownership of telecommunications companies; such rules exist for example in the USA and Canada.
- 4.15 Reviewing the current share ownership of companies that have been privatised and in which there is no or only a minority Government stake reveals that most of these incumbent operators now have a significant proportion of shareholders from outside the main country of operations. For those companies where such statistics are available, Telekom Austria and T-Mobile both have a majority of shareholders from outside Austria and Germany respectively. OTE and Portugal Telecom have more than 30% of their shareholders based outside their home countries.

- 4.16 However, we could find no indication that this situation caused any substantial concerns or had any real strategic or operational impact. We believe that this is mainly the result of three factors:
- (a) In the cases described above, none of the overseas shareholders holds a controlling stake;
  - (b) Most of the overseas shareholders are investment companies (rather than operational businesses) and are therefore probably viewed as “international” rather than as aligned to one specific country or even region; and
  - (c) Many of the privatised incumbent companies themselves now have significant operations overseas, as a result attracting overseas investors (eg, T-Mobile’s substantial US operations).
- 4.17 One example where these factors is not present is in the joint ownership by the Finnish and Swedish Governments (as well as by private investors) in Telia Sonera. While we could not find recent evidence of any public concerns about a possible loss of national identity as a result of the merger of the two former national PTTs, we did note that previous attempts to create a single merged Nordic telecoms operator and to merge Telia and Telenor failed, largely as a result of political differences and concerns over a loss of national identity.

### **Maintaining Safeguards**

- 4.18 In many countries, the legislation which initially corporatised the incumbent telecoms operator also established a minimum shareholding which the Government would be required to hold in the company. For most countries adopting this approach, a majority stake (ie. 50% plus one share) was the legal requirement. Thus, before the Government could seek to reduce its stake in the incumbent operator below this level, it was required to amend the governing legislation, ie. to require the approval of Parliament, thus triggering a wide debate about the respective benefits and potential disadvantages of such a decision.
- 4.19 In addition to this legislative safeguard, many Governments also included the retention of special or “golden shares” as an additional safeguard in their privatisation programmes. Golden shares were a feature of the privatisations in Italy, the Netherlands, Portugal, Spain and the UK. The special rights offered by the holding of these shares would allow the Government to veto certain categories of decision and to have the right to appoint members of the company’s Board, even when the Government held only a very small number of shares in total. The golden share was thus used as a convenient means of allowing the maximum financial benefit of privatisation (since virtually 100% of shares in the company could be sold) without the loss of the Government’s ability to maintain safeguards on the incumbent operator’s behaviour.

- 4.20 We found no evidence that any Government had ever formally used the rights available to it from the holding of golden shares (although it is of course possible that the existence of the golden share rights have forced informal negotiations with the Government prior to certain proposals being put forward at all). In nearly all of the countries listed above, the golden shares were given up by the Government prior to the last phase of privatisation. The two exceptions, are Portugal, as mentioned previously, and Italy. In Portugal, the Government continues to hold 500 golden shares, despite having “fully” privatised Portugal Telecom and the Government is insistent on its right to continue holding those shares, despite legal infringement action from the European Commission. In Italy, while the State no longer holds shares in Telecom Italia, it does maintain certain “special rights” under the terms of the Italian Privatisation Law to veto certain major decisions of the Board. However, we note that the exercise of these “special rights” have now been significantly restricted to situations in which the Italian Government can show that they are essential to protect the “vital interests of the State”.<sup>7</sup>
- 4.21 The Commission argues that, under the EU Treaty, the holding of such golden shares amounts to a restriction on the free movement of capital and hence a barrier to the Single Market. While the Treaty does allow for certain exceptions to the principle of the free movement of capital, these exceptions must consist of measures which are proportionate to the objective being sought. We note that previous pressure from the Commission led to the Governments in the Netherlands, the UK and Spain relinquishing their golden shares.
- 4.22 Using a similar but more detailed golden share approach, the New Zealand Government introduced the so-called “Kiwi Share” when it privatised Telecom New Zealand in 1990. Under this approach, the New Zealand Government continues to hold a single “Kiwi Share” which provides it with special rights, including the right to veto any person seeking to acquire a 10% or higher interest in Telecom or to veto a foreign person seeking to acquire a share higher than 49.9% interest in Telecom.<sup>8</sup>
- 4.23 Detailed provisions also apply in relation to the provision of the USO by Telecom New Zealand. Under the Kiwi Share agreement, Telecom must:
- (a) Maintain local free calls for residential consumers;

---

<sup>7</sup> A Prime Ministerial Decree of 10 June 2004 specifies that the vital interests of the State are in question only in the following cases:

- (a) severe and real risk of a lack in the supply and distribution of oil, energy, raw materials, telecommunications and transport;
- (b) severe and real risk to interrupt a public service;
- (c) severe and real danger for the safety of plants and of energy or telecommunication networks;
- (d) severe and real danger for the national defence and public order; and
- (e) health emergencies.

<sup>8</sup> While such ownership restrictions offend the underlying principles of the WTO GATS agreement, many countries, including New Zealand, the USA and Canada, include such restrictions in their GATS telecommunications services schedule

- (b) Charge no more than the standard residential line rental fee for rural residential customers; and
  - (c) Continue to provide at least the same level of network coverage as was available at the time of the privatisation in 1990.
- 4.24 In 2001, the Kiwi Share provisions were updated by agreement with Telecom to include basic internet access (but not broadband), to extend the network coverage obligation to the level of the 2001 network, and to include certain performance quality measures.
- 4.25 A final important aspect to note regarding the use of such safeguards is the issue of effective enforcement. For example, when the international satellite provider, Intelsat, was privatised in 2001 (Intelsat had previously been owned by a number of national governments), certain safeguards were put in place through a Public Services Agreement (PSA) to ensure that Intelsat would continue to provide global satellite coverage and would continue to provide service to developing countries at rates no higher than those charged prior to privatisation. However, there are some concerns that the PSA may fail to protect the safeguards in the manner originally hoped for, mainly because of concerns about the status of the PSA in the event that Intelsat should fall into bankruptcy (a situation which is not totally improbable, given Intelsat's current high levels of indebtedness). We note, for example, concerns expressed by the Danish NRA regarding the safeguarding of services currently provided by Intelsat within Greenland.<sup>9</sup>

---

<sup>9</sup> See Annex P of 2005 Annual Report of IT- og Telestyrelsen

## **5 IMPACT OF PRIVATISATIONS ON MARKETS**

- 5.1 In this section of the report, we consider the impact of privatisations of the incumbent telecoms provider on the relevant national market for telecoms.

### **Liberalisation and Competition**

- 5.2 We found in general that it was difficult to separate the effects of privatisation from those of market liberalisation in the countries studied. Partly, this was because the timings of many of the privatisation programmes coincided with market liberalisation. However, we felt that the main reason was that privatisation was closely linked to liberalisation, not just in timing, but also as an integral part of the liberalisation process, in terms of allowing the incumbent operator to re-organise itself to face a new competitive market and also as a way for the Government to demonstrate to potential new entrants that it would be independent and even-handed in its treatment of all market players.
- 5.3 In the UK, for example, the privatisation of BT was the keystone to the liberalisation of the market. The design of BT's privatisation and of the terms of the market liberalisation were very much linked together. The Government resisted pressure to separate BT's business (as had happened, for example, in the USA) so that BT could continue to offer a strong presence in the UK and potentially abroad. The form of market liberalisation was (initially) also deliberately restricted to a duopoly (between BT and Cable & Wireless) in order to allow BT time to re-organise itself to meet the demands of competition. Similarly, in many other countries, the privatisation of the incumbent was used as a means to help it to prepare for the competition which it would meet in the future liberalised market, including the practice adopted in Austria, Belgium and Ireland of partnering through a trade sale with a stronger telecoms company.
- 5.4 In all of the markets we studied, the combination of privatisation and market liberalisation has led to significant reductions in call prices, starting initially with reductions in the price of international and national calls but then later extending also to local call prices (as rebalancing occurred and as competition began to impact the access market). Market liberalisation also led naturally to a rise in the number of new competitors and a fall in the market share of the incumbent telecoms providers, most notably in the mobile sector where there could be a realistic prospect of full infrastructure-based competition. Consumers, of course, benefited from this enhanced level of competition and from the lower prices available.
- 5.5 However, we could find no correlation between the success of market liberalisation and the extent of the privatisation process in the countries studied. Some countries with fully privatised incumbents nevertheless show indicators of difficult competitive conditions, with continuing high market shares for incumbents and continued complaints from new entrants, such as in Italy, Germany and Spain. Other countries

with Government controlled incumbents, show indications of a more competitive market, such as Norway. We therefore believe that the effectiveness of the regulatory regime in a country is a more important factor in the overall effectiveness of the competitive market than the extent of privatisation of the incumbent operator.

- 5.6 Nevertheless, the extent and implementation of privatisation does have some impact on the attractiveness of a country's market for potential new entrants and investors, indicating the extent to which the Government is trusted to treat each market player fairly. As the OECD has noted in respect of Germany:<sup>10</sup>

“The continued delays in privatization have not been helpful especially with regard to concerns about the conflict of interest between the Government's role as a shareholder and as a policy-maker and regulator seeking a competitive telecommunications environment.”

- 5.7 Similarly, academic studies have found a correlation between continued public ownership of the incumbent telecoms provider and less independent, more favourable regulation (see Waverman and Bauer.<sup>11</sup>

## Employment and Efficiency

- 5.8 We felt that we might be able to observe the impacts of privatisation most closely in terms of the improvements in efficiency of the incumbent telecoms operators, including the employment impacts. In most countries, one of the more important benefits sought to be achieved by the privatisation of the incumbent operator was to realise increased efficiency in the operations of the company. This is expressed by Governments in a number of different ways but most commonly in the sense of “preparing the company for the demands of the competitive market”.

- 5.9 We reviewed two types of measures to assess the incumbents' efficiency performance:

- (a) Return on Capital Employed (ROCE) or Return on Investment (ROI); and
- (b) Revenue per Employee.

- 5.10 While information to assess efficient performance over time was not available for all the countries studied, where it was available, nearly all of the incumbent operators in these countries experienced an improvement in efficiency. Those companies experiencing improvements in ROCE / ROI were TDC in Denmark and Telecom Italia

---

<sup>10</sup> Regulatory Reform in Telecommunications, Germany, OECD, 2004

<sup>11</sup> “The Effects of Public Ownership and Regulatory Independence on Regulatory Outcomes”, Waverman, Journal of Regulatory Economics; 29:1 23–67, 2006 and Regulation And State Ownership: Conflicts And Complementarities In EU Telecommunications Johannes M. Bauer, February 2005



- (both fully privatised), while companies that increased their revenue per employee were Telekom Austria, DT in Germany, OTE in Greece (all with minority Government ownership) and BT in the UK (fully privatised). Of the countries for which efficiency measures could be found, only Telenor in Norway (majority owned by Government) experienced a decline (although we should state that the statistics we were able to find did not include recent years).
- 5.11 This analysis indicates that privatisation can help to generate efficiency benefits for the incumbent telecoms provider, perhaps particularly where the privatised (or part-privatised) company also faces the incentive of having to become more efficient in order to meet the demands of competitors in a newly liberalised market. (We recognise, however, that other factors may also play a significant part in achieving such efficiency gains, such as changes to national labour legislation, any general increase in labour market flexibility and any changes made to the employment status provided to employees of the incumbent operator.)
- 5.12 A review of academic studies on the effects of privatisation confirms that efficiency benefits are the main area of positive impact. Wei found that full privatisation (where private owners had control rights) contributed substantially to improving the allocation of labour and capital, expanding service output and network penetration, and improving labour and total factor productivities.<sup>12</sup> Bortolotti found that privatisation is significantly related to higher profitability, output and efficiency.<sup>13</sup>
- 5.13 We were aware, however, that there is a potentially significant cost to the generation of such improved efficiencies in the level of employment for telecoms workers. One of the key concerns for Governments, when considering privatisation, is the impact on employment and public and political concerns about this issue, including union lobbying.
- 5.14 We reviewed the impact of privatisations on employment and found that, in all cases where figures were available, employment within the incumbent telecoms provider had fallen following privatisation. However, we also examined the effect of liberalisation on employment, assessing the overall level of employment in the telecoms sector in each country (where figures were available) to assess the net effect on employment in the sector.
- 5.15 We found that the net employment effect of privatisation was inconclusive. Four countries experienced a net overall increase in employment, of which two (Denmark and the Netherlands) had fully privatised their incumbent operators, one (Germany) had a minority share, and the other (Norway) had a majority share in the incumbent.

---

<sup>12</sup> "The Impact Of Privatization And Competition In The Telecommunications Sector Around The World" Wei Li, Lixin Colin Xu, Aug 2004

<sup>13</sup> "Sources of Performance Improvement in Privatised Firms: A Clinical Study of the Global Telecommunications Industry"

Four countries had experienced a net decrease in employment, of which two (Italy and Spain) had fully privatised their incumbent operators, and two (Sweden and Portugal) had a minority share in the incumbent. One country, Austria (with a minority stake in the incumbent) experienced a broadly neutral net impact on employment.

## 6 IMPACT OF PRIVATISATIONS ON USO

6.1 In this section of the report, we consider the impact of privatisations of the incumbent telecoms provider on the definition and fulfilment of universal service obligations.

### Universal Service Obligations

6.2 Universal service is a well-established concept to ensure the availability of services on reasonable terms to all members of society. In the telecoms sector, there are four main areas where a universal service obligation (USO) may be required:

- (a) Coverage: an obligation may be placed on a provider to extend its network coverage to areas of the country where it would not otherwise be commercially viable to provide service;
- (b) Affordability: there may be a need for a provider to offer specially tariffed services for poor customers or for customers who are particularly expensive to serve;
- (c) Special needs: there may be a need for a provider to offer special services, for example, services tailored for disabled users; and
- (d) Quality: an obligation may be placed on a provider to ensure that its services maintain specified minimum levels of quality.

6.3 The rationale for the USO in the telecoms sector may be based on a number of different grounds. The World Bank suggests the following reasons:<sup>14</sup>

- (a) To permit full participation in society: access to telecoms is now widely seen as a basic right for all citizens and provides access to essential services, such as for emergency calls;
- (b) To promote national, political and economic cohesion;
- (c) To promote economic development: without adequate access to telecoms and the internet, countries will not be able to optimise economic growth;
- (d) To encourage more balanced distribution of population: otherwise there would be an exaggerated drift to urban areas; and
- (e) To eliminate disparity between rural and urban areas.

6.4 It can be seen that the USO is a form of “safety net” to ensure that a set of basic

---

<sup>14</sup> Telecommunications Regulation Handbook, Module 6, Universal Service, The World Bank, 2000

telecommunication services will always be available at a determined quality and an affordable price. The USO is therefore of particular importance in the context of market liberalisation and privatisation when there may be fears that competing providers, without express Government mandate, would fail to provide these basic services to all citizens.

6.5 The exact terms of the USO are not defined in the same way in every country. Within the EU, the basic principles of universal service are set out in Directive 2002/22/EC on Universal Service and Users' Rights and defined as the provision of a set of services to all end-users regardless of their geographical location and, in light of specific national conditions, at an affordable price – these services to include:

(a) Connection to the public telephone network at a fixed location to allow local, national and international telephone calls, fax and data transmissions, including functional internet access;

(b) Availability of a directory enquiry service;

(c) Availability of public pay telephones; and

(d) Facilities for disabled users and those with special social needs.

6.6 The USO Directive recognises that the costs of providing universal service may constitute an “unfair burden” on the designated USO provider and therefore allows that provider to recoup any net costs of USO provision (as calculated by the NRA) through a transparent sharing mechanism, ie. a universal service fund to which other telecom providers contribute.

## **Impact of Privatisations**

6.7 The possibility that the privatisation of the incumbent telecoms provider could have an impact on USO provision is based on the premise that a Government owned (or controlled) organisation is more likely to follow the Government’s policy wishes to provide USO. In some countries, concerns about the impact of privatising the incumbent telecoms operator have gone further to suggest that it would not be possible to guarantee the fulfilment of the USO with a fully privatised operator, ie. in a situation where there would only be regulatory oversight and not Government ownership control of at least some degree.

6.8 In Australia when the Government was considering the final phase of Telstra’s privatisation (Telstra is the Australian incumbent operator), a number of concerns were raised about the impact on consumers in the long run, particularly as regards the provision of the USO for rural and disabled consumers. The main concerns were that a fully privatised company would not have sufficient motivation to fulfil its USO obligations because:

- (a) Privatised organisations demand a higher rate of return from their assets and are therefore more willing to close down low return assets, such as might be expected from rural telecoms operations;
  - (b) Management of privatised organisations are more likely to resist perceived intrusions into their management autonomy, such as would result from the enforcement and policing of USO performance; and
  - (c) Privatised organisations would be less likely to wish to develop future or improved services which these have a mainly socially beneficial impact (cf. a good commercial return).
- 6.9 Nevertheless, the Government in Australia did eventually proceed with the full privatisation of Telstra in 2006. In doing so, the Government did not amend any of Telstra's responsibilities with regard to the USO but it did provide for a "social bonus" from the proceeds of the sale. The "social bonus" allocated funds from the privatisation to improve the communications facilities available to rural consumers, to improve television and telecoms coverage, and to extend access to free local calls.
- 6.10 The Australian case might be argued to be an example where a Government was willing to compromise on the optimum level of the USO in order to ensure the success of a privatisation (although presumably the Australian Government would disagree with this suggestion). In the case of the other countries studied for this report, we did not find any evidence that Governments had been willing to compromise on the definition or standard of USO in order to ensure that a privatisation would be successful. In fact, in most countries, the definition of the USO has not changed since the USO concept was first established and therefore it would be very hard to assess whether any such compromise had been made.
- 6.11 If one were to assume that a privatised company is less keen to fulfil the USO, one might anticipate the following categories of possible impact on USO from privatisation:
- (a) Service and quality failures: a failure to fulfil universal service obligations or an increasing tendency to fall short of the quality standards demanded for USO provision;
  - (b) Increase in USO costs: as the privatised provider seeks to recoup the full costs of USO provision from other industry players and perhaps also seeks to establish high USO costs as an argument against the requirement for USO at all; and
  - (c) Changes to the definition of USO: the privatised provider might be expected to argue strongly against any extension of the definition of USO and perhaps also to argue in favour of a more restricted definition of USO.

## **Service and Quality**

- 6.12 We found no clear evidence that privatisations had any effect on the ability or desire of the incumbent operator to fulfil its universal service obligations or to provide the requisite level of quality in respect of those obligations.
- 6.13 Few countries publish statistics which seek to measure the general fulfilment of the obligation to provide basic telephony services. However, a number of countries do publish statistics which illustrate the USO provider's performance in respect of certain quality measures (such as fault repair times) and in respect of the provision of public call boxes.
- 6.14 Where these statistics were available, we reviewed them to assess the performance of the incumbent operator against the USO quality measures imposed under their own national regulations. We found no pattern in these statistics to reveal the relative performance of incumbent providers in relation to their privatisation status. There was good performance from fully privatised companies, such as PTT in the Netherlands and from Government controlled companies, such as Telia in Sweden and OTE in Greece. There were also some examples of under-performance against the USO standards from fully privatised companies, such as TDC in Denmark, and also from companies in which the Government continues to maintain some level of ownership interest, such as Portugal Telecom (noting, however, that the maintenance of a golden share would not allow the Portugese Government to become involved in operational management issues such as the company's quality of performance).
- 6.15 One aspect to note is a general decline in the penetration levels for fixed line phones. While, at one level, it could be argued that this represents a failure to fulfil the USO (which is clearly defined in terms of a fixed line connection for basic voice telephony), our view is that this decline is a significant indicator that many people now rely on mobiles for their basic voice telephony needs and therefore no longer have a requirement for a traditional fixed line telephony connection. We note that a number of regulators (eg. FICORA in Finland) are discussing whether to amend the definition of USO to allow specifically for the provision of telephony services through either fixed or mobile access.<sup>15</sup> Furthermore, in Australia, the incumbent operator, Telstra, is permitted to meet its USO obligations in certain remote rural areas through the use of mobile technology, including wireless local loop and satellite equipment.

## **USO Costs**

- 6.16 We found no evidence that privatisations had any impact on the costs of the provision

---

<sup>15</sup> Although the underlying principle of technological neutrality should make this definition irrelevant, we note that the current wording of Article 4 of the EU's USO Directive refers specifically to connections and access "at a fixed location"

of the USO. Where countries operate a USO fund and publish figures on the costs of USO provision, there were some indications that fully privatised operators were experiencing increased costs, such as in Italy and Spain. However, we also found that there were no USO funds to compensate providers in the UK and in Denmark, both countries where the incumbent provider has been fully privatised, and no formal appeals from those privatised operators that a USO fund should be established. While we acknowledge that, under the EU's USO Directive, NRAs have the power to decide that the provision of the USO does not justify additional specific funding (because the NRA calculates that there are no net costs to the provision of the USO), we believe that this finding is relevant because of the expectation that fully privatised operators might seek to mitigate the financial impact of the USO "burden" on themselves.

### **USO Definition**

- 6.17 In most countries, the definition of the USO remains restricted to basic fixed telephony (in addition to some ancillary services, such as directory enquiries). However, this definition is being challenged in two major respects:
- (a) Many USO providers are requesting that there should be a more flexible approach to the means by which such basic fixed telephony services should be provided; and
  - (b) Governments are considering whether the definition should be extended to ensure the provision of broadband access throughout society.
- 6.18 In the first case, USO providers argue that the traditional reliance on a fixed line phone for basic telephony services is now changing, in particular because of the mass market reach of mobile phones. A number of households now do not have a fixed line phone connection but rely totally on their mobiles, a trend which can be seen in the reduction of fixed line penetration in a number of countries, particularly in the past three years. A related consideration is that many countries currently include a requirement on incumbent operators to provide public call box services as part of the USO, setting out a minimum required coverage of call boxes (normally based on the number of call boxes for each x thousand adults or for each community of a certain size). In light of the near universal penetration of mobile phones in nearly all the countries reviewed in this study, many USO providers argue that the maintenance of such call box coverage is unnecessary.
- 6.19 In the second case, the debate is a more fundamental one about the nature of the USO. While it is undoubtedly the case that the definition of the USO must be flexible and should change to reflect technological and societal development, the question is the speed at which such developments should be reflected in the USO. One view might be that the USO should remain only as a last resort safety net. Under this view, it would only be appropriate to expand the definition of the USO when the service in question is almost universally available and used by the population, ie. one would

- expect the market penetration for the service on a commercial basis to have reached 75% or 80%. The alternative view is that the USO should be used to ensure that the whole of society can enjoy the benefits of new critical technologies and services, ie. to avoid the creation of a “digital divide”. As such, the crucial question is not the level of penetration of a service but the degree of importance of the service and its value to all members of society.
- 6.20 Taking a relatively simplistic view, one might expect a more commercial organisation (ie. a fully privatised company) to be in favour of a more flexible approach to the fulfilment of the USO (the first case) and against the extension of the USO (the second case). Allowing a more flexible approach to fulfilment should help to reduce the costs of USO, while extending the definition of the USO could substantially increase those costs. A Government controlled telecoms operator might equally be expected to take an opposing view, in light of its desire to secure the public interest as defined by the Government.
- 6.21 However, we did not find that the views of the incumbent telecoms providers in the countries studied matched this simplistic view. While there were a number of operators which opposed the existing inclusion of call boxes within the USO definition, these operators included both fully privatised companies (eg. BT in the UK) and companies which are majority owned by the Government (eg. Belgacom). Similarly, there were strong opponents to the future expansion of the definition of the USO to include broadband both from fully privatised companies (as one might anticipate), such as Telefonica in Spain but also from Government controlled companies, such as DT in Germany (DT has a significant 31.7% minority Government stake). DT’s view went further in that it seemed to argue against the concept of the USO altogether, suggesting that any social safety net might be more efficiently provided through the standard tax system rather than by a telecoms specific measure.
- 6.22 A further potentially interesting example is that of the UMTS licence award process in Sweden. At the time of the UMTS licence award, Telia was majority owned by the Swedish Government but failed to win a licence (the only incumbent in a major EU country to fail to secure a UMTS licence). The main reason for its failure was that in the assessment of the different UMTS bids (the Swedish UMTS award process was conducted as a “beauty contest”, comparing the merits of the different bids), Telia submitted a bid which offered less dense network coverage than that of the other (eventually successful) bidders, with around one fifth the projected number of base stations. While one might legitimately question the reasonableness of the claims made in the other bids, particularly in light of those companies’ subsequent failures, it is interesting to note that it was the Government controlled company that proposed the lowest level of coverage.
- 6.23 Finally, it is worth noting that Korean Telecom, the incumbent provider in South Korea, was privatised in May 2002. South Korea is widely considered as one of the most developed countries in the world in terms of telecoms provisions and enjoys one of



the highest rates of broadband coverage in the world. Broadband provision is very actively promoted through Government programmes, including a campaign to raise broadband penetration in rural areas even beyond their current levels. Therefore, South Korea has been able to reach a position of very high broadband coverage without the need for direct Government ownership of the incumbent telecoms operator but with significant Government encouragement of the benefits of highly developed communications capabilities.

## 7 CONCLUSIONS

7.1 Privatisation of the previously Government owned telecoms provider has been a key feature of the recent development of telecoms markets. There are a range of different motives for privatisation, including:

- (a) Revenue generation;
- (b) Improving the efficiency of the incumbent provider;
- (c) Releasing the incumbent provider from any restrictions imposed by public ownership;
- (d) Improving the prospects for the incumbent provider to attract additional private investment funding; and
- (e) A demonstration to potential new market entrants of the independence of the Government.

7.2 Often, a Government's goals for privatisation will encompass a number of interlinked motives, along with its own party political beliefs.

7.3 Nevertheless, it seems clear that, in many of the countries reviewed in this study, privatisation has been an integral part of the move to liberalise the telecoms market and to introduce effective competition. The important benefits that a Government seeks to gain from privatisation are typically that privatisation will:

- (a) Help to prepare the incumbent provider for the challenges for the newly liberalised and competitive market; and
- (b) Signal to potential new entrants that the Government will be fair and even-handed to all market players.

7.4 Assessing the impact of privatisation in isolation to the effects of liberalisation is very difficult. From the analysis that we have performed, we would observe the following:

- (a) The consumer benefits that arise from enhanced competition and lower prices should generally be attributed to the effects of liberalisation rather than privatisation;
- (b) The most critical factor affecting market development and competition is the effectiveness of the regulatory regime; while privatisation is relevant to this consideration (notably in the signal sent by a Government as to its even-handed approach to new entrants when deciding whether or not to privatise the incumbent operator), it is not the most significant issue; and
- (c) Privatisation most obviously impacts on the relative efficiency of the incumbent

telecoms provider, allowing it to streamline its operations and to compete more effectively in the liberalised market.

- 7.5 When we reviewed the provision of the USO by incumbent telecoms providers, we found no clear evidence that the fulfilment of universal service obligations is either beneficially or adversely affected by privatisation. While concerns have certainly been expressed that full privatisation removes the safeguard of Government intervention as a shareholder of the incumbent operator and therefore puts USO fulfilment at risk, we did not find any substantial evidence to support this concern. As indicated above in the case of market liberalisation, it is more likely the case that the critical factor in the fulfilment of the USO is, in the absence of Government control through ownership, the effective operation and enforcement capabilities of the national regulatory authority for telecoms.<sup>16</sup>
- 7.6 Finally, we would suggest that, if a Government is particularly concerned about the loss of effective Government influence as a result of a move to full privatisation of the incumbent telecoms provider, it should consider the example of New Zealand and its “Kiwi share”. This appears to offer the possibility of the maximising the sale proceeds from a full privatisation (because virtually 100% of the company will be sold), while striking a balance between the benefits of installing a fully commercial ownership and management and the political and social concerns arising from USO and national identity issues. While it might be argued that the retention of such a golden share could reduce the value and operational flexibility of the privatisation process and of the incumbent company, the risk for a private investor should in reality be no more than the standard regulatory risks it would face from an effectively established telecoms regulator.
- 7.7 One should also, however, consider whether the implementation of a golden share is proportionate where there is an effective regulatory regime to protect the fulfilment of the USO. In the case of EU Member States, there is a requirement for an independent regulatory authority to enforce the provision of the USO and the ability to (in effect) “appeal” to the European Commission in the event of a failure to comply with the provisions of the USO Directive. In the case of New Zealand, where market liberalisation took place (almost uniquely) without sector-specific telecoms regulations and without a telecoms regulator in place, the Kiwi share may have been a critical safeguard of the USO. For countries outside the EU (and without the safeguard of an “appeal” to the Commission) but which can rely on the enforcement powers of an independent regulatory authority, it is possible that a golden share may offer an additional helpful safeguard, even if the need is not so clear as perhaps it was in the case of New Zealand.

---

<sup>16</sup> We acknowledge that indirectly privatisation may affect the fulfilment of the USO since, if privatisation contributes to more effective regulation, it should also help to ensure the effective regulation of the USO.