

Office of the Director of  
**Telecommunications  
Regulation**

## **The Irish Telecommunications Market**

### **Quarterly Review**

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## Legal disclaimer

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# 1 Introduction

This review summarises the developments in the Irish Telecommunications sector in the period since our last review on 16<sup>th</sup> June 2000. The review includes:

- A general overview of regulatory developments in the Irish Telecoms market
  - A market overview discussing recent market developments
  - A summary of sector restructuring and changes in company ownership
  - An international comparison of telecommunications tariffs
- Appendix I includes a full list of licensees in Ireland and their areas of activity;

All figures and statements expressed in this review seek to reflect developments in the Irish market since the ODTR's last quarterly review in June 2000. While every effort has been made to include the most up-to-date figures and estimates, we have in some instances, referred to earlier data. The data used to estimate market size has been calculated from a questionnaire distributed to all licensed operators in Ireland, covering the period 1<sup>st</sup> April – 30<sup>th</sup> June 2000. The ODTR would like to take this opportunity to thank the operators and organisations who have contributed information and comments for this review and appreciates their efforts in facilitating the publication of this document. The Director continues to encourage all operators to complete the questionnaire on a quarterly basis to ensure as complete a picture as possible of the Irish market can be presented in the quarterly review.

List of companies who responded:

<i>eircom</i>	TNS Ltd.
Esat Telecom	Timas Ltd.
OCEAN Communications	EGN (T/a Equant)
Esat Net	Global One Communications
Worldcom	Hibercall
GTS Business Services (Ireland) Ltd.	Swiftcall
Interoute	Switchcom
Cable & Wireless	ITG Group
ntl:	Stentor Communications
Irish Multichannel	Budget Telecommunications Ltd.
Eircell	World Telecom (T/a Tore Telecom)
Esat Digifone	S.M. Communications (T/a Worldlink)
Conduit Enterprises Ltd.	Meridian Communications (T/a Imagine!)

These replies cover most of the industry by volume and value. The ODTR is following up with the other smaller operators who did not respond.

## 2 Regulatory Developments

In the three months since our last review, there have been a number of key developments in the regulatory environment, which have had significant implications for the development of competition in the Irish telecommunications market.

### 2.1 Licensing

In June the Director issued the third mobile phone licence to Meteor. Under the terms of the licence, Meteor have nine months in which to launch their service. The company has stated that it expects to be in a position to be able to roll out its services by the start of the Christmas season. The prospect of a third operator in the mobile market has already precipitated greater competition in the marketplace with both Eircell & Digifone announcing substantial reductions in their tariffs, reducing the cost of on-net prepaid calls by up to 50%.

During the quarter, the Director also announced that the competition for the selection of licensees for the next generation mobile phone technology (3G) would be a comparative selection process - also known as a 'beauty contest'. She also announced that she favours the issue of four licences in total including one reserved for a new entrant to the market. In deciding on the beauty contest option, the Director believes that this format will best serve the goals of achieving the best in price, choice and quality for the consumer. In particular, the Director stressed the ability of beauty contests to ensure speedy roll-out of networks, extensive geographic coverage and guarantees of service performance. The Director also emphasised the opportunities a beauty contest offers in terms of developing effective competition on the supply side, such as enabling 3G operators to roam on 2G networks and encouraging the entitlement of third parties to access mobile networks (e.g. MVNOs, resellers, etc...). Through a comparative selection process the Director sees an opportunity to request offers from bidders and, by marking these in a comparative fashion, to promote voluntary commitment to allow access.

Coinciding with the announcement regarding the design of the 3G competition, the Director also released a report on the regulatory framework for access in the mobile market. This report outlines the Regulator's conclusions on a range of access issues including airtime resellers, indirect access providers and mobile virtual network operators (MVNOs). The report acknowledges the scope for commercial negotiation of access agreements within the current legislative framework and points out that there are no regulatory barriers to network operators concluding such negotiations. However, the report goes on to say that in the event that there is failure of commercial negotiations, the Director will, on a case-by-case basis, consider taking action in accordance with her powers to facilitate competition and ensure that the benefits of competition can be maximised for end-users. The Director believes that by providing consumers with the widest choice of operators, that it is the consumer who will ultimately benefit as operators strive to innovate and satisfy demand by offering the best mix in terms of price and quality.

In the fixed line sector, the recent issue of FWPMA<sup>1</sup> licences, also known as 'wireless in the local loop' licences, should further increase competition in this market. FWPMA technologies provide operators with a quicker and less expensive alternative to connecting customers than would be the case with copper or fibre cable. Six of the seven licences were issued during

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<sup>1</sup> Fixed Wireless Point to Multipoint Access (also known as wireless local loop') offers an alternative means to provide the connection from the customer's premises to the nearest network access point for the provision of telecommunication services. It offers a radio-based alternative to copper or fibre optic cable.

June and July of this year. Broadband and narrowband licences were issued to both *eircom* and Princes Holdings Ltd, while Formus Communications and Esat Telecom received a further broadband licence each. Esat Telecom will receive their narrowband licence shortly. At this time, the Director also issued a consultation on the possibility of awarding additional narrowband and broadband FWA licences, as well as allocating additional spectrum for new and existing licences.

The Director views this technology is a critical enabler in facilitating the growth of electronic commerce, information and entertainment services. The recent awarding of broadband licences should cater for the needs of medium to large users enabling such services as PABX connection, broadband Internet access, bandwidth on demand and fast file transfer, while the narrowband licences should meet the needs of the majority of residential and small business users offering mainly basic telephony, Internet and ISDN connections in both urban and rural areas.

In August, the Director also announced that she would issue one National TETRA licence, which would be awarded on the basis of a comparative selection process and which would be valid for 15 years. TETRA (Terrestrial Trunked Radio) is a mobile communications service aimed at professional business users, which can deliver a broad range of voice and data services in both public and private networks. More sophisticated than existing two-way business radio communications, users will be able to tailor the service to suit their own requirements enabling them to combine the functionality of high performance business radio with access to the public telephony network and mobile data services.

During the last three months, one additional General and three Basic licences were awarded, bringing the current totals to 47<sup>2</sup> and 29 respectively. To date 25 of the 44 General licences and 19 of the 29 Basic licensees have commenced operations offering a variety of telephony and network services to both Irish and international users (see Appendix I for details).

## 2.2 Enabling Competition

As well as facilitating the entry of new operators into the market, the Regulator also ensures that there is fair competition amongst existing players. Regulation, in the form of legal obligations based upon the principles of non-discrimination, transparency and cost-orientation, ensure that fair competition is upheld in the critical areas of interconnection, access, quality of service, accounting separation and cost-based pricing. By regulating the behaviour of operators with significant market power, the ODTR encourages the development of alternative service providers, thereby ensuring that consumers will have the widest choice of possible options available to them.

One of the most effective ways of promoting the development of competition is to ensure that the interconnect prices *eircom* charge other licensed operators (OLOs) for terminating calls are amongst the most competitive in Europe. In June, following the ODTR's decision on interconnect matters in April, *eircom* announced reductions of almost 23% on the interconnect rates paid by the other licensed operators as at the end of 1999. This reduction, the most significant fall in rates since the liberalisation of the market in December 1998, places Ireland well within the EU's best practice benchmarks. Taken in tandem with *eircom*'s July announcement of average price reductions of 35% for customer sited interconnect circuits<sup>3</sup>, an excellent opportunity now exists for the new entrants to provide cost effective services. This

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<sup>2</sup> This total does not include the licence originally awarded to NASC Teoranta (T/a IOL), but recently surrendered to the ODTR. IOL continues to trade, but now operates under Esat Telecom's licence.

<sup>3</sup> These are the 'leased lines' of the telecoms industry enabling other telecoms companies to carry vast volumes of traffic over their networks.

competition should not only result in lower prices and better services for the end-user, but also should strengthen Ireland's reputation as a centre for e-commerce internationally.

Another key issue for effective competition in the market is the delivery of circuits – both interconnection circuits and leased line circuits. *Eircom* is required by law to provide these to its competitors. Following intervention by the ODTR, delays in the delivery of backlogged interconnection circuits have largely been eliminated. However, delivery of leased line circuits by *eircom* to competitors remains poor despite a number of interventions by the ODTR.

As well as developing competition in the fixed line sector, the Director is also taking measures in the broadcasting sector to ensure that the consumer benefits. In August, the Director set out the framework for price regulation for basic television services provided by the cable and MMDS operators. Under the terms of their licences, cable and MMDS operators are required to obtain the consent of the Director before making any adjustments to prices. The framework outlined by the Director sets out clear guidelines as to how such applications will be evaluated. Given that operators in these markets enjoy in-platform exclusivity until 2004, the Director believes that until competition is fully developed, it is appropriate that the prices that operators charge for their basic package be subject to external review. The Director believes that the mechanism established strikes the right balance between protecting the interests of consumers and facilitating the needs of operators to cover the increased costs of developing their networks and services.

Also in the broadcasting sector, the Director recently issued a consultation paper on the use of ADSL technology to deliver digital television services and in particular licensed programme services to consumers. ADSL, a technology which allows the use of the copper wire to send a large quantity of data (e.g. television picture) in one direction and a small quantity (e.g. a control channel) and a telephone call in the other, is blurring the traditional distinction between broadcasting and telecommunications. At present separate regimes exist for the licensing of telecommunications and broadcasting and separate obligations apply to operators in those sectors. This consultation paper will look at the implications this technology will have for the legal and regulatory frameworks covering these sectors over the next 3-4 years, and how best to meet the growing demand for broadband home services.

## 3 Market Overview

Since our last review in June, the Irish telecommunications sector has continued to experience expansion, with almost all segments of the market experiencing increased demand. Based on figures from the operators for the quarter to June 2000, the ODTR estimates that total revenues for the fixed, mobile and broadcasting markets are now worth over IR£1.85 billion a year - an increase of over 10% on previous estimates<sup>4</sup>. Given the steady reduction in prices during the past 12 months, the growth in traffic volume should comfortably exceed this figure. Expressed as a portion of total national output, the telecom sector is now estimated to account for approximately 2.7% of Irish GDP, a figure broadly in line with most other Western European economies. Employment in the sector continues to grow with the ODTR estimating that over 18,000 people are employed amongst the licensed operators alone.

In common with most other countries, the fixed line market continues to attract a very high level of competition. The arrival of new entrants has precipitated an intensification of competition as all operators bolster their efforts to attract and retain new and existing customers. Based on data supplied by the operators for the three months to June 2000, the ODTR estimates that the new entrants' share of the fixed line market is in excess of 15%<sup>5</sup>. The full automation of carrier pre-selection<sup>6</sup> since April 2000 has greatly facilitated this competition, with the ODTR estimating that as of the end of June there were over 60,000 business & residential subscriber lines using CPS. This figure, however, underestimates the real level of competition as many businesses have dedicated leased line connections. The ODTR expects the growth in the new entrants' share of the fixed market to continue, given amongst other things the substantial increase in circuit delivery to OLOs and the imminent introduction of geographic number portability<sup>7</sup>.

### 3.1 Fixed Line Services

At the end of June 2000 the number of PSTN lines remained relatively constant standing at just under 1.59 million. This figure, comprised of approximately 1.08m residential lines and 0.51m business lines, is not likely to increase rapidly, given the increasing popularity of mobile and businesses' growing reliance on ISDN and dedicated leased line connections. Using the latest population figures available<sup>8</sup>, the total number of PSTN lines per 100 inhabitants stands at just under 42, still below the EU average of 48.5<sup>9</sup>. However, given the rapidly changing mix of access technologies being deployed, the relative importance of this indicator has diminished. A better indicator of the level of adoption of telecom voice services would be the number of telecom access paths. A telecom access path has the equivalent voice carrying capacity as an ordinary PSTN telephone line, but could also include access being provided by mobile lines and ISDN access channels. As can be seen from figure 3.1 below,

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<sup>4</sup> The European Information Technology Observatory estimated that the Irish telecommunications market was worth £1.66 billion in 1999.

<sup>5</sup> This figure is based upon responses supplied by the operators to the ODTR's Quarterly Review Questionnaire covering the three months to June 2000. The definition used for the fixed line market includes all retail and interconnect revenues earned from Fixed network and ISP services. Direct comparisons with previously quoted market shares in earlier reviews should not be drawn, as a greater number of new entrants' responses are included this quarter.

<sup>6</sup> Carrier pre-selection is a service that enables a subscriber to the fixed network to select a different carrier from the local loop operator for the routing of all or some of its outgoing calls.

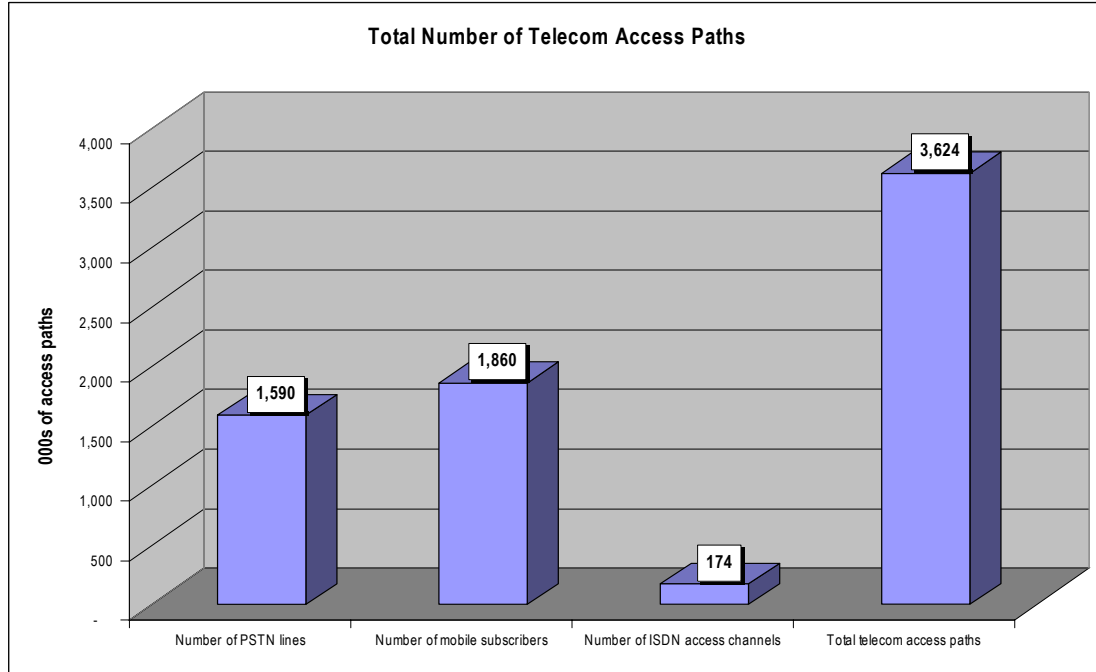
<sup>7</sup> Number portability refers to the ability of end-users to retain their telephone numbers when they change their network operator or service provider, their location or their service. This service is due to be introduced on a phased basis from July to November 2000.

<sup>8</sup> Source: CSO 12<sup>th</sup> September 2000. Estimate based on CSO population figure of 3.79m as of April 2000. Previous ODTR penetration rates were based on a population figure of 3.68m.

<sup>9</sup> Source: [www.newentrants.com](http://www.newentrants.com) EU average figure for 1999.

this indicator better captures the growing contribution of mobile as a means of communication in Ireland today. With mobile lines accounting for over 1.8 million of the 3.6 million telecom access paths, mobile phones have surpassed fixed PSTN lines as the most popular means for voice communications.

**Figure 3.1: Total Number of Telecom Access Paths – June 2000.**



Source: ODTR Quarterly Review Questionnaire

While the breakdown of telecom access paths can generally be used to measure the differing technologies deployed for voice communications, the level and growth of data communications can best be determined by looking at the number of leased lines<sup>10</sup>. Given their ability to carry large amounts of information and data, leased lines are becoming increasingly important for facilitating the growth and development of e-commerce. Table 3.1 below illustrates the breakdown of leased line circuits in Ireland as at the end of June by capacity.

**Table 3.1: Number of Leased Line Circuits – June 2000<sup>11</sup>**

Number of leased line circuits	Total
less than 2Mbit/s	30,299
2Mbit/s	6,456
greater than 2Mbit/s	141
<b>Total</b>	<b>36,896</b>

Source: ODTR Quarterly Review Questionnaire

Currently, the majority of leased lines are under 2Mbit/s and are supplied to end customers. The growth in data traffic and the Internet however, is pushing up business' need for bandwidth. This demand is also driving the demand for leased line and interconnect circuits amongst the OLOs. In June 2000 alone, *eircom* delivered interconnect circuits to the OLOs

<sup>10</sup> A leased line is a dedicated telecom line that has been leased for private use. By contrast with PSTN and ISDN lines, it is not a switched or dial-up line. Typically, large companies rent leased lines from the telecom operators to interconnect different geographic locations in their company.

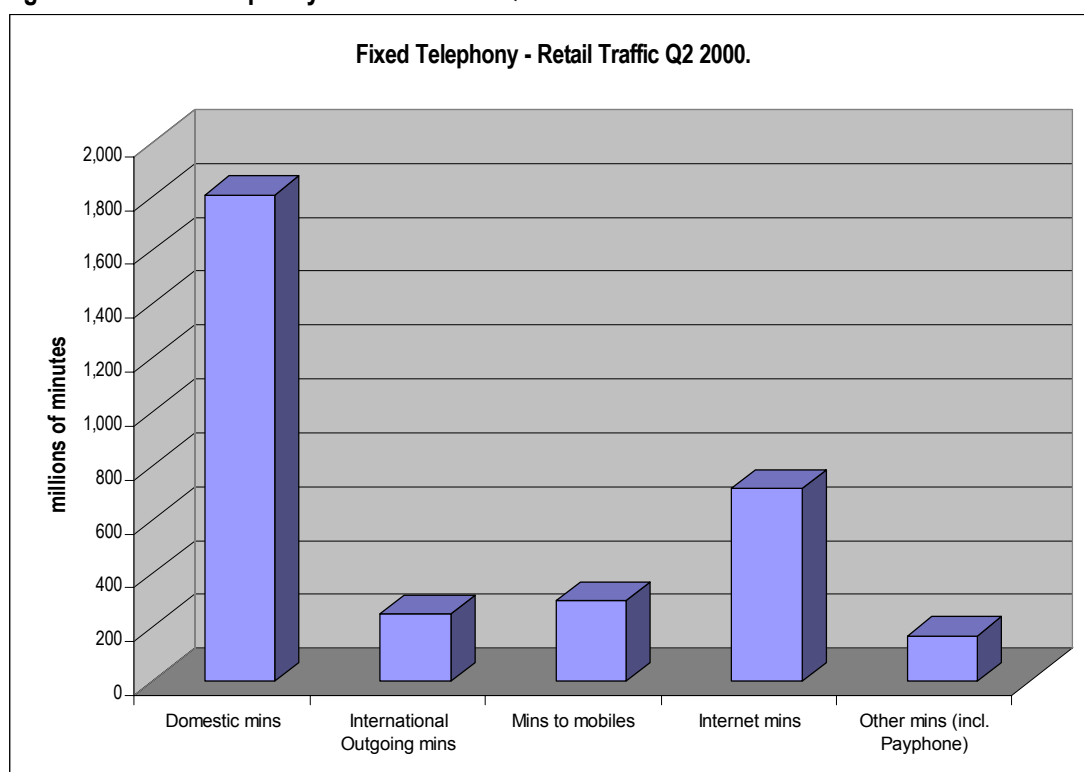
<sup>11</sup> No leased line circuit figures for either Worldcom or Cable and Wireless are included in this table, as neither of these companies were able to provide the relevant figures.



capable of delivering over one billion minutes a year<sup>12</sup>. For the three months to end June 2000, the ODTR estimates that the total retail leased line market was worth approximately IR£20m<sup>13</sup>. However, the quality of service delivery provided by *eircom* to the OLOs has been inadequate, despite a number of interventions by the ODTR seeking to assist in improving it. Most recently the ODTR took action to uncap penalties payable by *eircom* for late delivery and *eircom* has taken a court action against ODTR on this matter.

In terms of the traffic being carried on the fixed networks, the growth of the Internet is having a significant effect on the traffic mix. From a negligible position only a few years ago, Internet traffic has grown to the point where it now represents approximately 22% of total fixed minutes (see fig 3.2 below). With voice traffic increasingly migrating to the mobile networks, domestic traffic which includes both local and national long-distance calls, now accounts for just over 55% of total fixed traffic. The shares of both outgoing international minutes and other minutes have remained relatively constant accounting for approximately 7% and 5% of the market respectively, while despite the huge growth in the number of mobile subscribers, interestingly calls to mobiles still only make up 9% of total fixed traffic.

**Figure 3.2: Fixed Telephony – Retail Traffic Q2 2000.**



Source: ODTR Quarterly Review Questionnaire

Given that the majority of large businesses would have unmetered leased line access to the Internet, most of the Internet traffic described above would be accounted for by residential customers. On the back of the growing popularity of subscription-free Internet access, the ODTR estimates that as of the end of June 2000, there were between 400,000 - 450,000 residential subscribers in Ireland regularly using the Internet<sup>14</sup>. Further growth in this figure is expected over the coming months as the two main cable operators - ntl: and Chorus Communications, roll out their local broadband networks across the major population centres.

<sup>12</sup> ODTR Press Release 24<sup>th</sup> July 2000.

<sup>13</sup> Source: ODTR Quarterly Review Questionnaire. The retail leased line market includes only the identifiable revenues from the sale and resale of leased line products to end-customers only. The sale of leased lines to OLOs are not included.

<sup>14</sup> This figure is based on estimated numbers of Internet subscribers provided by the operators.

As of the end of June 2000, the ODTR estimates that there were approximately 615,000 cable & MMDS subscribers in Ireland, while over 1 million households were passed by<sup>15</sup>.

Both operators will hope to leverage this large customer base in their bid to gain an advantage in the emerging market for digital TV services in Ireland. A survey published by Ofel in August stated that almost 1 in 5 UK households now subscribe to digital TV services. One third of these households subscribed to digital TV without previously having had analogue cable or satellite services. The survey also reveals that the greater choice of channels that digital TV offers is the key incentive for take up, with fewer than 1 in 5 people using the interactive services such as home shopping and e-mail.

**Table 3.2: Fixed Services offered in the residential markets.**

Operator	International	Long Distance	Local
<i>eircom</i>	✓	✓	✓
Esat Telecom *	✓	✓	✓
OCEAN *	✓	✓	✓
Interoute Ireland Ltd.	✓	✓	✓
Chorus Communications	✓	✓	✓
Hibercall	✓	✓	✓
Switchcom	✓	✓	✓
Swiftcall	✓	✓	✓
Valuetel	✓	✓	✗
SM Communications	✓	✓	✗
Torc Telecom	✓	✗	✗

\* Both owned by BT

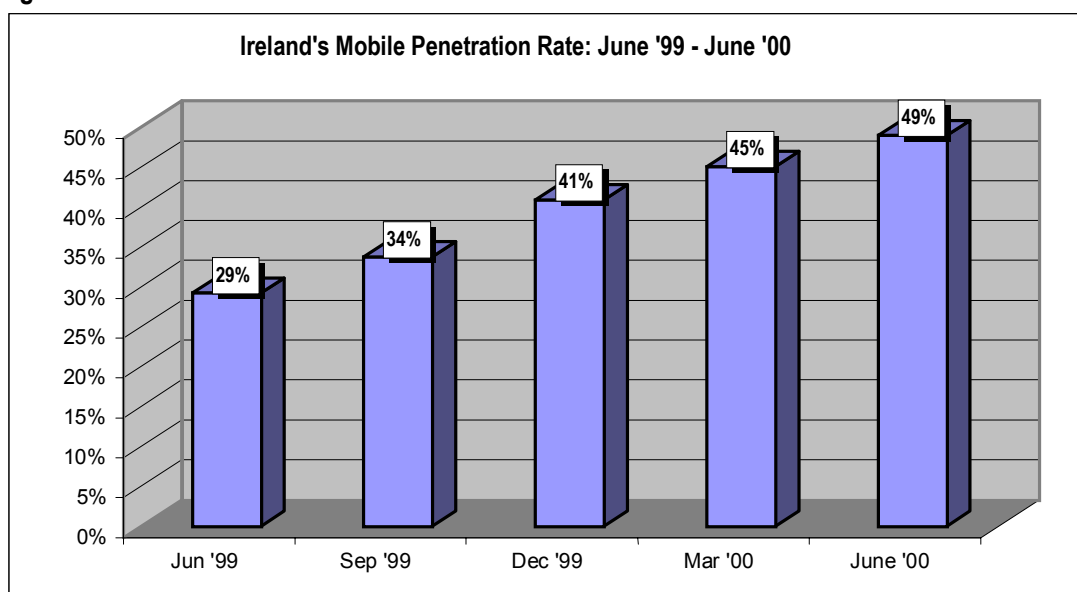
**Source:** ODTR June 2000.

<sup>15</sup> This figure describes the number of households in the country that subscribe or could potentially subscribe to cable or MMDS services. No major installation work would be required to enable these potential subscribers to avail of services as there is already infrastructure available in their areas.

## 3.2 Mobile Communications

The Irish mobile penetration rate has maintained its upward trend, rising from 45% at the end of March 2000 to 49% at the start of June 2000. With the third fastest relative growth rate in Western Europe, the total number of mobile subscribers now stands at just over 1.86 million<sup>16</sup>, up from the 1.65 million figure reported in our June Review. Eircell continues as the larger operator with a reported figure of just over 1.1 million subscribers, bringing their share of the market to approximately 60%<sup>17</sup>. Overall there has been a significant change in the relative market shares of the mobile operators in the last 12 months, with Digifone improving from 33% a year ago to their current market share of 40%.

**Figure 3.3: Ireland's Mobile Penetration Rate: June '99 – June '00.**



Source: FT Communications - Various editions.

This growth in mobile subscriptions is expected to continue over the coming months encouraged amongst other things by the growing popularity of mobile data services. Both Eircell and Digifone see huge growth opportunities in this area and in recent months both operators have launched their own web portals and ISP services. Using these services subscribers can now receive email alerts, download information from the Internet and have a computerised voice read out emails over the phone.

Although the maximum speed currently possible via the GSM network is 9.6 Kbit/s, both operators are investing heavily in GPRS (General Packet Radio Services) technologies, which in the initial stages will offer speeds of up to five times current GSM speeds. In theory, GPRS packet-based service should cost users less than circuit-switched services since communication channels are being used on a shared-use, as-packets-are-needed basis rather than dedicated only to one user at a time. It should also be easier to make applications available to mobile users because the faster data rate means the middleware currently needed to adapt applications to the slower speed of wireless systems will no longer be needed. Once GPRS becomes available, mobile users of a virtual private network (VPN) will be able to access the private network continuously rather than through a dial-up connection. GPRS is an evolutionary step toward Enhanced Data GSM Environment (EDGE) and eventually UMTS or 3G services.

<sup>16</sup> Source: FT Mobile Communications, June 23<sup>rd</sup> 2000.

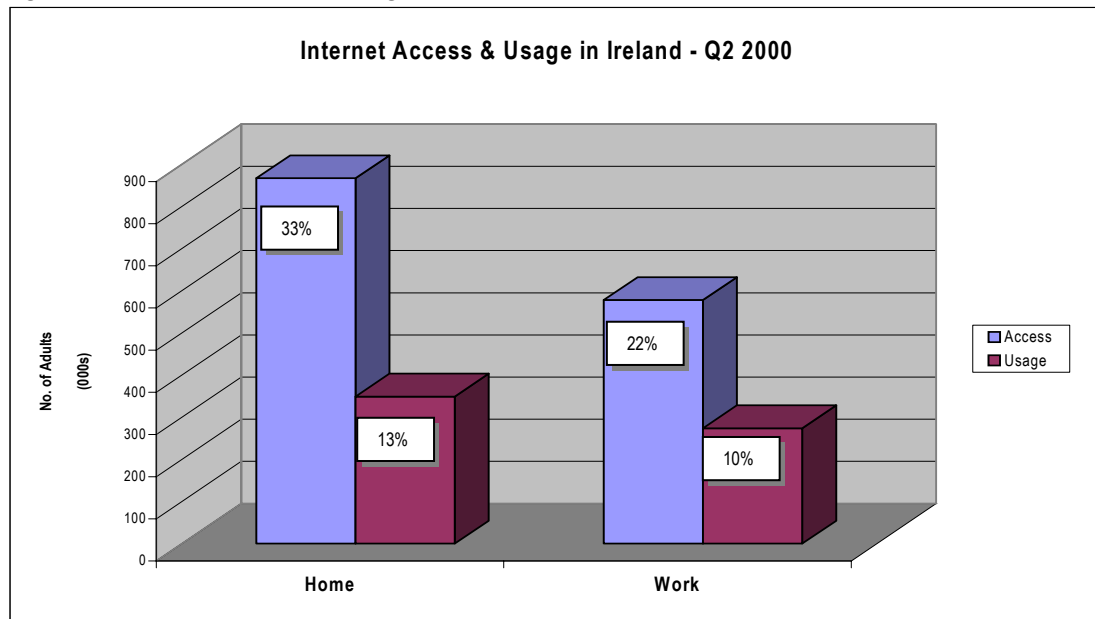
<sup>17</sup> Source: FT Mobile Communications, June 23<sup>rd</sup> 2000.

### 3.3 Internet & Multimedia

Since our last review in June, the residential Internet market in Ireland has continued to experience steady growth. Buoyed on by the increasing popularity of subscription-free packages, Nielsen NetRatings estimate that as of the end of June, approximately 33% of Irish adults (16+) had home Internet access (see fig 3.4). This represents a 25% increase on the corresponding figure reported for April and would appear to suggest that Ireland is finally catching up with the higher home Internet penetration rates that are commonplace in Scandinavia and the US.

However, additional research conducted by Amarach Consulting suggests that the proportion of these adults who are actually surfing the net is less than half<sup>18</sup>. According to Amarach's TrendWatch Report for Q2 2000, only 13% of Irish adults (349,000) describe themselves as current users of the Internet at home. Although this is an increase on the 11% (293,000 users) figure reported by Amarach in February, it would appear that there is still a significant number of people with home Internet access, who choose not to use it. While a similar gap is also evident in the workplace (see fig 3.4), the extent of this divergence is somewhat less, with access at 22% and usage at 10%.

**Figure 3.4: Internet Access & Usage in Ireland – Q2 2000**



Sources: Nielsen//NetRatings Global Internet Trends, Q2 2000 (access figures); Amarach Consulting June 2000 (usage figures).  
 Notes: Nielsen's population is based on all adults (16+) with a fixed line telephone. Amarach's population is based on all adults (15-74).

Of those people who do choose to use the Internet at home, it appears that they are spending an increasing amount of time online. According to Nielsen's Internet figures, the average Irish home user spent over 4 hours and 39 minutes online in July. Although this is still somewhat behind those countries where flat rate access is more common (see table 3.1 overleaf), it represents an increase of over 15 minutes on the corresponding figure for March 2000.

<sup>18</sup> Source: Amarach Consulting TrendWatch Technology June 2000. The TrendWatch Technology survey is based on in-home interviews with a nationally representative sample of 1,011 adults (aged 15-74) conducted during the last two weeks of April and the first two weeks of May.

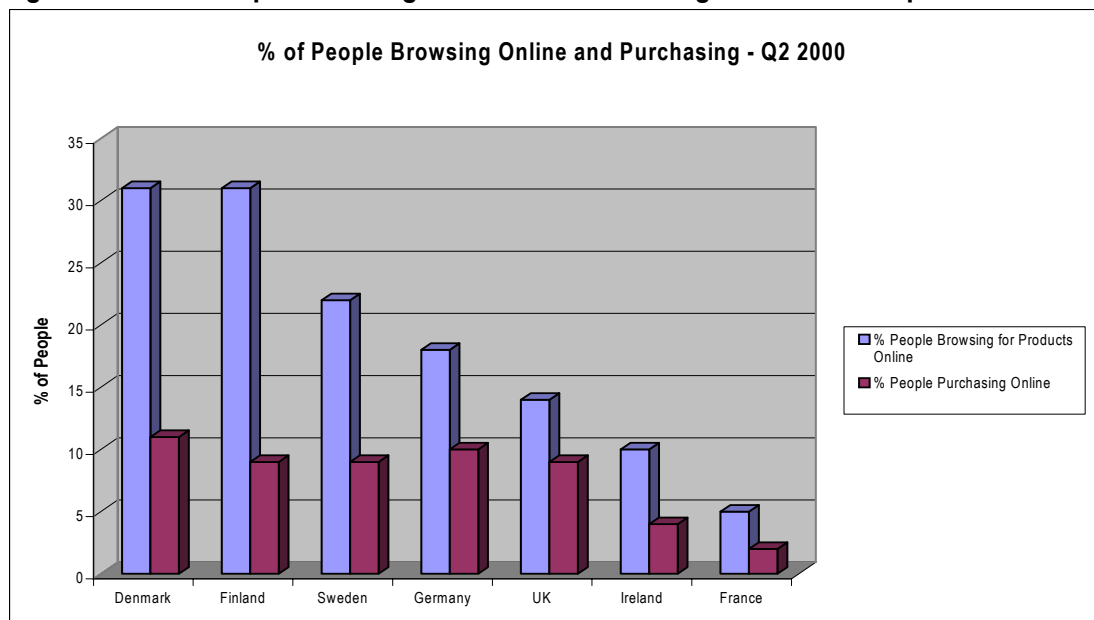
**Table 2: Average Internet Usage for Ireland, the UK and the US, July 2000.**

	United States	Ireland	United Kingdom
Number of Sessions per Month	18	10	11
Number of Unique Sites Visited	10	18	17
Time Spent per Site	54:00	15:39	18:01
Time Spent per Month	9:14:18	4:39:07	4:57:30
Time Spent During Surfing Session	31:26	29:02	27:52
Duration of a page viewed	00:46	00:45	00:46
Active Internet Universe (actually surfed)	89.42million	382,386	8.96million
Current Internet Universe Estimate (those who had access, but did not necessarily go online)	146.4million	895,441	19.52million

Source: Nielsen/NetRatings, July 2000.

Finally, in relation to the levels of online browsing and purchasing, Ireland again appears to be some way behind its European partners and in particular the more mature Internet markets in Scandinavia. According to Nielsen NetRatings' figures for Q2 2000 only 10% of Irish adults have used the Internet for browsing products and pricing, while only 4% have actually purchased online (see fig 3.5). This is lowest of any of the countries listed, except for France whose low figures are representative of their lack of Internet penetration. Amarach Consulting have estimated the value of the Irish consumer e-commerce market in 2000 to be worth only IR£60 million, although they expect this figure to rise to approximately IR£850 million by 2003<sup>19</sup>.

**Figure 3.5: % of People Browsing Online and Purchasing in several European Countries.**



Source: Nielsen/NetRatings Global Internet Trends, Q2 2000. Based on a population of all adults (16+) in households with fixed telephone line(s) and who have browsed the Internet for products and pricing in the past 6 months.

<sup>19</sup> Recruitment's e-Evolution: Amarach Consulting September 2000

## 4 Ownership Trends and Development of Competition.

Following buoyant levels of M&A activity during the first half of the year, the last three months have been considerably more subdued with only low levels of consolidation, predominantly amongst the smaller operators. In July, cable operator Princes Holdings Ltd., acquired a 51% stake in Switchcom, a telecommunications provider formerly wholly owned by Independent Newspapers. Independent Newspapers, part of the Independent News and Media Group, is a joint owner of Princes Holdings Ltd. along with AT&T's cable arm Liberty Media Group. In recent weeks Independent News and Media have indicated to stock market analysts that it is considering the disposal of its 50% share in the cable venture<sup>20</sup>. Princes Holdings, which trades as Irish Multichannel, claims to have approximately 250,000 cable and MMDS subscribers and is currently investing more than £300 million in upgrading its fibre optic and wireless network. The acquisition of Switchcom is expected by Irish Multichannel to consolidate its service offering in voice services, ahead of its planned launch of voice telephony and Internet services over its cable platform later this year. Currently, the cable operator is going through a re-branding process and will be known as Chorus Communications.

Only weeks following its acquisition by Princes Holdings, Switchcom acquired the business of Jupiter Telecommunications Services Ltd., a switchless reseller with a customer base predominantly in the Midlands and West of Ireland. Established in 1996, Jupiter provides postpaid solutions to the SME market, where it claims to have over 3,000 customers. The company also offers services in the SOHO and residential markets, and recently has expanded into Galway and the Southeast.

Elsewhere, Nevada tele.com, the Northern Ireland telecom and Internet company has announced the completion of the acquisition of Stentor Communications, the Dublin-based telecoms group, for IR£46million. Nevada, which only entered the Northern Irish telecoms market in August 1999, is a joint venture between wholly owned subsidiaries of Northern Ireland electricity company Viridian and UK telecoms & utilities company Energis. The new company, which has already begun rolling out its network, specialises in offering integrated voice, data, e-commerce and Internet services to business customers. The acquisition of Stentor is seen as furthering its penetration in this segment of the market and will enable the company to operate on an all Ireland basis competing against established rivals Cable and Wireless, Esat Telecom/OCEAN and *eircom*.

Another Northern Ireland company entering the Republic's telecoms market is Ulster Television (UTV) plc. In June, the Belfast-based media group announced the introduction of a residential Internet service - UTV Internet in the Republic, in a move which forms part of a £10 million sterling investment in its Internet division. UTV's entry into the Republic's Internet market follows its earlier £4.25 million sterling acquisition of DNA Internet in March of this year. At the time of its acquisition DNA Internet was one of Northern Ireland's leading ISPs, while it also claimed to have approximately 3,000 customers in the Republic<sup>21</sup>. UTV intends to spend £1.9 million marketing its new service and plans to extend its offerings to business customers before the end of the year. UTV's introduction of an Internet service in the Republic coincides with the launch of its new telephony services in Northern Ireland.

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<sup>20</sup> Source: Sunday Tribune 10<sup>th</sup> September 2000.

<sup>21</sup> Source: Irish Times 10<sup>th</sup> March 2000.

## 5. Review of Telecommunications Tariffs

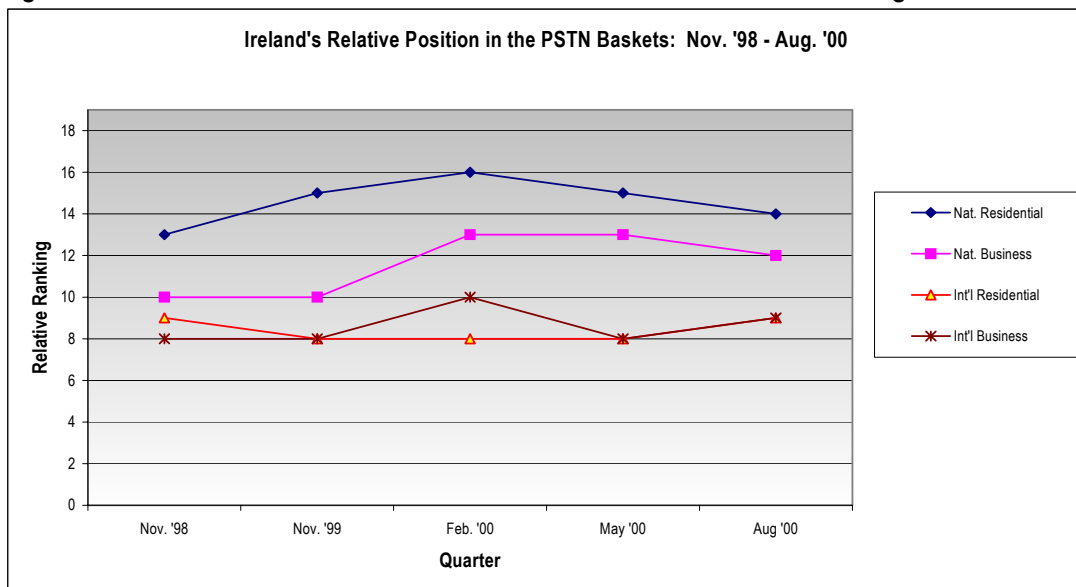
This section compares movements in incumbents' tariffs<sup>22</sup> for a range of telecommunication services since the ODTR's last review in June. The tariff comparisons, generated from the pricing of a number of baskets of telecom services, effectively rank Ireland's position against a group of key countries in relation to telecom tariffs. The baskets, which are constructed by Teligen using an OECD approved methodology, provide a "snapshot" of Ireland's position vis-à-vis other countries at a particular point in time. The baskets of services examined in this review include:

- National PSTN
- International PSTN
- National Leased Lines
- International Leased Lines

### Overview

Overall the trend in Ireland's PSTN tariffs during the quarter has been mixed. In the national sector, Ireland has improved its position by one ranking in both the residential and business baskets since our last report in June. Despite this improvement Ireland still remains in the 3<sup>rd</sup> quartile of the 19 key countries surveyed, achieving rankings of 14<sup>th</sup> and 12<sup>th</sup> respectively. Since the liberalisation of the market in 1998, Ireland's ranking in the national PSTN table has slipped slightly (See figure 5.1). However, this graph does not reflect the absolute fall in prices that have occurred over this period. While Ireland's PSTN tariffs have fallen quite dramatically, the graph shows that they have not fallen as much as those in the other countries surveyed. To improve Ireland's competitiveness we need to not only reduce our prices, but we also need to reduce them to rates lower than that of our main international rivals. This is the only way that Ireland can improve its position in the rankings. In relation to international PSTN tariffs, Ireland slipped one ranking to 9<sup>th</sup> position in both the business and residential baskets. Despite this setback, the graph shows that since November 1998 Ireland's international tariffs have generally fallen in line with the other countries surveyed.

**Figure 5.1: Ireland's Relative Position for various PSTN baskets: Nov. '98 – Aug. '00**

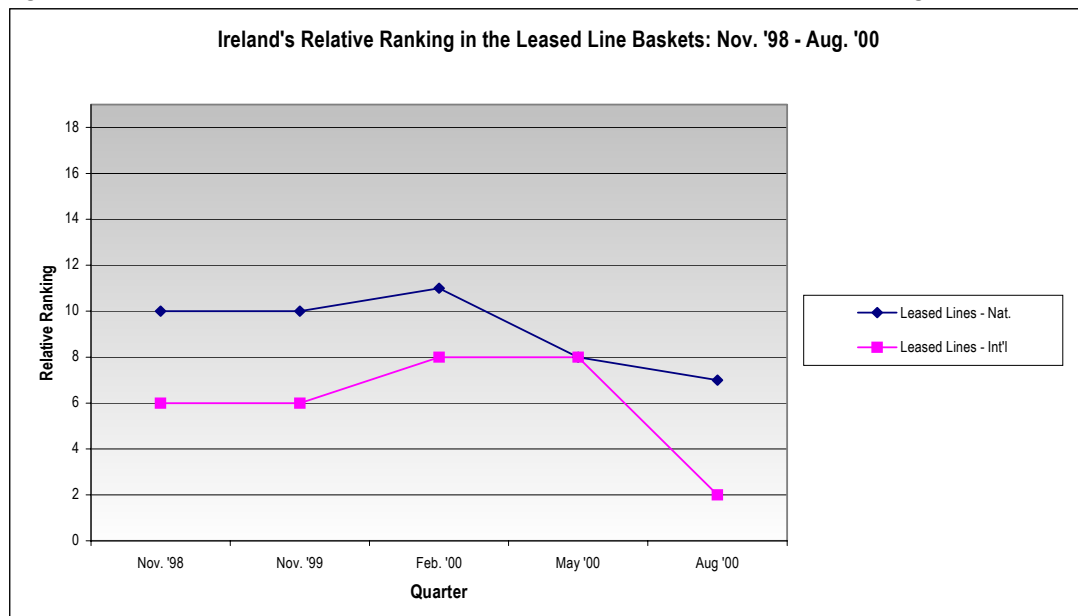


<sup>22</sup> It should be noted that competing operators sometimes offer cheaper tariffs and this would also be true in the other countries surveyed.

In the leased line sector, Ireland has made some significant improvements, particularly in the international leased lines basket. Since our last report in June, Ireland has climbed from 8th to 2<sup>nd</sup> position in this market, just behind the leading country Denmark. Ireland is now comfortably in the upper quartile of this market, having previously hovered between 6<sup>th</sup> and 8<sup>th</sup> position for the previous 21 months. Ireland's significant improvement this quarter can in part be attributed to the increased competition in this market arising from the recent introduction of the Government supported Global Crossing link.

In the national leased lines basket Ireland's ranking has also improved, climbing one position from eighth to seventh. This improvement follows *eircom*'s recent introduction of average price reductions of 16-18% for national leased lines, with effect from July 1<sup>st</sup>. These reductions, and in particular the reductions on the key 2MB rate, have brought Ireland into the second quartile of countries with the lowest tariffs. Despite the absolute size of the reductions, Ireland's relative improvement in ranking has been somewhat muted. This is in part due to Switzerland's dramatic improvement (from 12<sup>th</sup> to 6<sup>th</sup>)<sup>23</sup>, along with the fact that the five Scandinavian countries were and continue to remain considerably ahead of the other countries in terms of their national leased line prices.

**Figure 5.1: Ireland's Relative Position in the Leased Line Baskets: Nov. '98 – Aug. '00.**



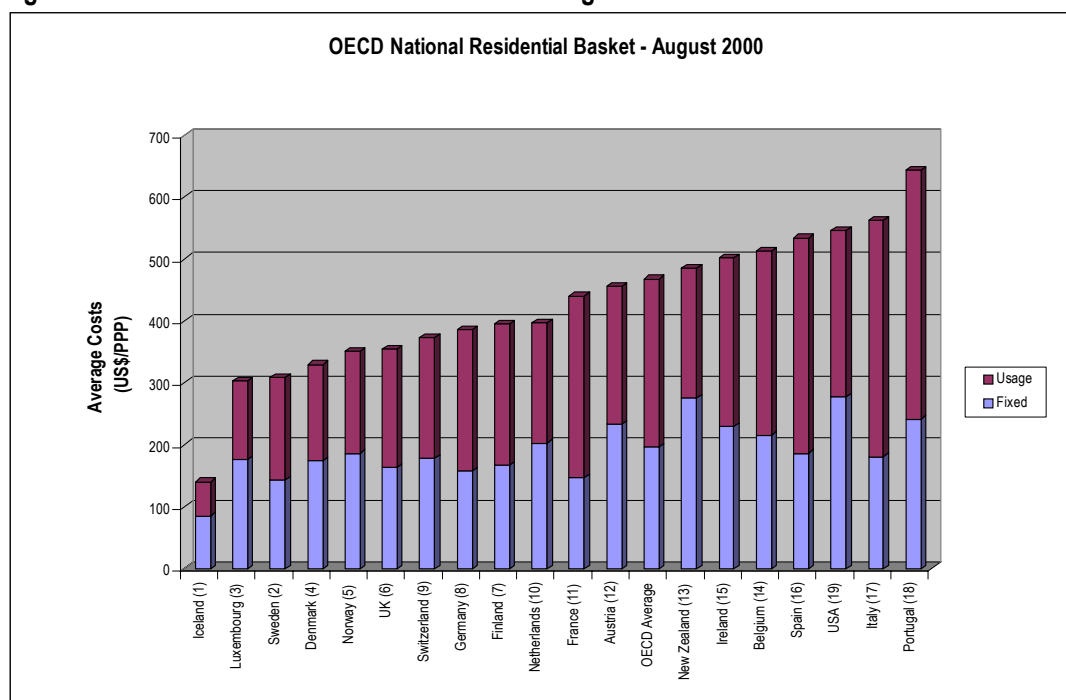
<sup>23</sup> In August Swisscom introduced reductions of up to 30% on their national leased line tariffs.



## 5.1 National Residential Basket<sup>24</sup>

The ‘National Residential Basket’ examines the average cost of national (incl. local) calls for the residential sector. At the ODTR’s last review in June 2000, Ireland was ranked 15<sup>th</sup> among 19 key countries, 9 positions behind the U.K. and 2 positions behind the OECD average. As set out in figure 5.3 below Ireland has gained one position and is currently rated 14<sup>th</sup>, however it still remains two positions behind the OECD average.

Figure 5.3: OECD National Residential Basket – August 2000.



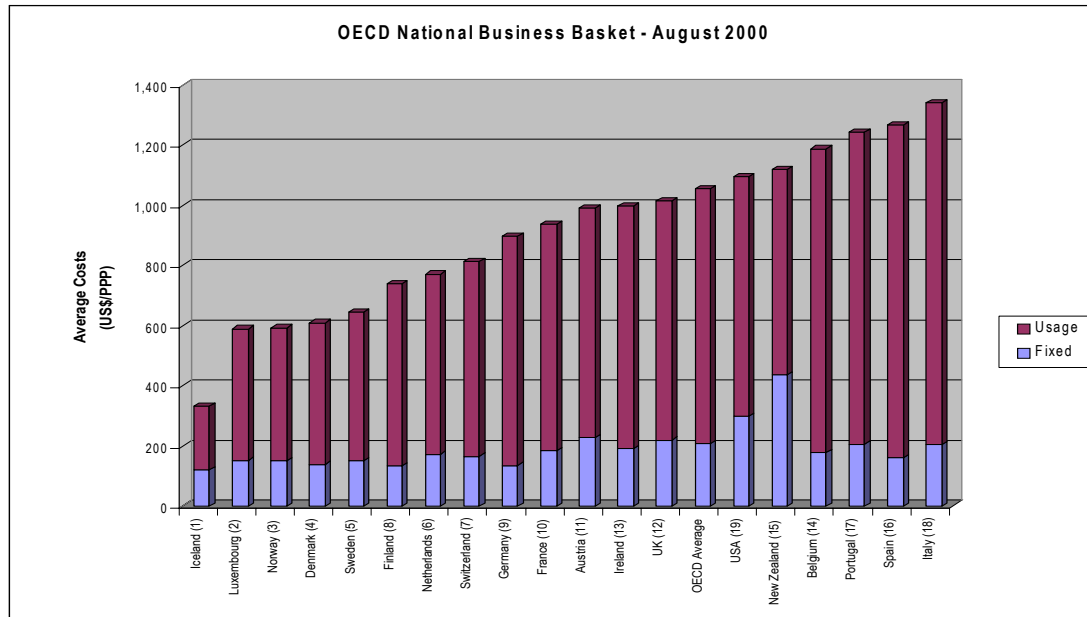
NB: The numbers in brackets represent the countries respective rankings as at June 2000

## 5.2 National Business Basket

The ‘National Business Basket’ examines the average cost of national (incl. local) calls for the business sector. The business basket is comprised of a much larger number of calls compared to the residential basket, with a greater proportion at peak times although they are generally of shorter duration. Previously in June, Ireland was ranked 13<sup>th</sup>, one position behind the U.K. and one position ahead of the OECD average. As illustrated by figure 5.4 overleaf, Ireland has overtaken the U.K. and moved up one position into 12<sup>th</sup> place. With little change throughout the rest of the basket, Ireland is now two positions ahead of the OECD average.

<sup>24</sup> The ‘National Baskets’ are based on a fixed number of calls. This call volume level will not change from update to update as before, based on the fixed / usage relationship. The Residential basket call volume is set at 1200 calls, distributed over 14 different distances from 3 to 490 km, at 6 different times of the day (4 in the week and 2 in the weekends), and four different durations, depending on the time of day and distance. The business basket call volume is set at 3600 calls, distributed over 14 different distances from 3 to 490 km, and 6 different times of day (4 in the week and 2 in the weekends). The national business call duration is now set at 3.5 minutes, regardless of the time and distance. The Baskets are calculated using average calls, while the residential basket includes VAT; the business basket excludes VAT. For the purpose of this document we focus largely on European countries, although it is important to note that the ‘OECD average’ figure represents the average cost for all the 29 OECD countries.

**Figure 5.4: OECD National Business Basket – August 2000.**

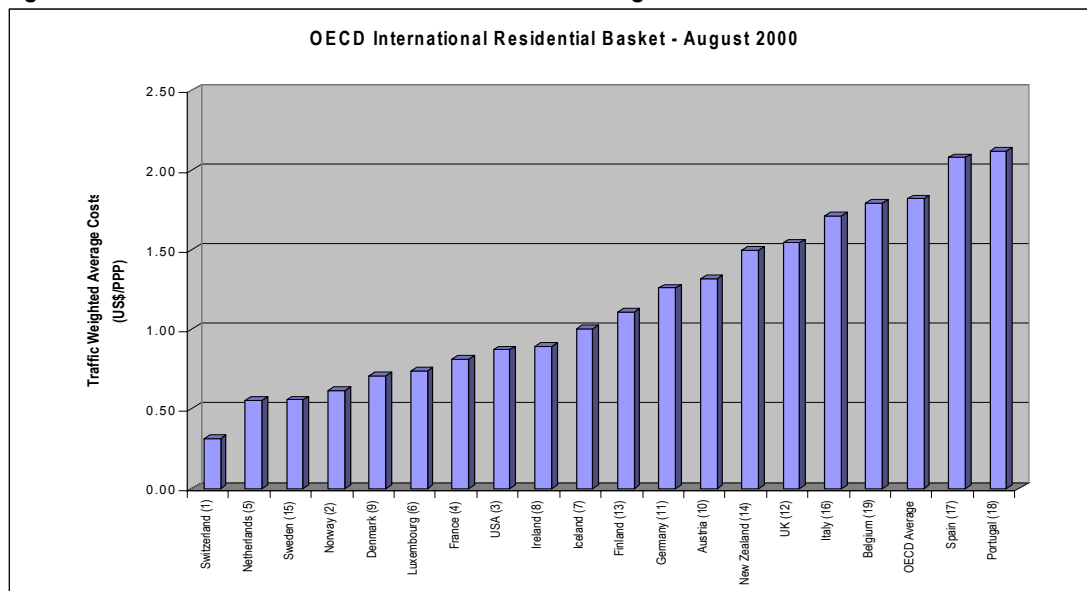


NB: The numbers in brackets represent the countries respective rankings as at June 2000

### 5.3 International Residential Basket<sup>25</sup>

The international residential basket sets out the average cost of international calls for residential users. In our last review, Ireland was ranked in 8<sup>th</sup> position, four rankings ahead of the U.K and nine ahead of the OECD average. It can be seen from figure 5.5 that Ireland has dropped one position to 9<sup>th</sup> place. Sweden moves up 12 rankings to third, following the decision by Telia to reduce its international tariffs by an average of 50% in August.

**Figure 5.5: OECD International Residential Basket – August 2000.**



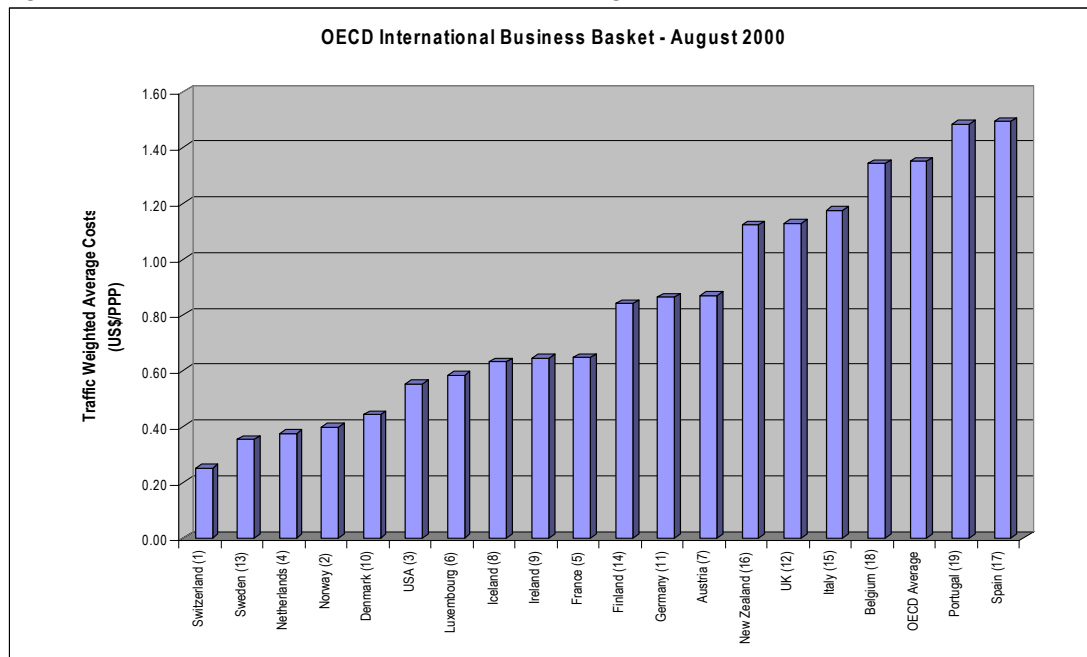
NB: The numbers in brackets represent the countries respective rankings as at June 2000

<sup>25</sup> The PSTN International Baskets are now calculated using the revised OECD methodology. The output of the traffic-weighted basket presents average call costs of 3-minute peak calls and 5 minutes off-peak calls from one country to all other countries in the basket. The residential basket includes VAT, and takes 25% of the call cost from peak charges, and 75% from off peak charges.

## 5.4 International Business Basket

Figure 5.6 sets out the average cost of international calls for business users. Like the national baskets, the international baskets have different weights for the business and the residential sectors. The business basket apportions 75% of the calls to peak rates, while the residential basket apportions only 25% to peak rates. As can be seen from the graph below, Ireland has maintained the 9<sup>th</sup> position it held last June. However, Ireland is now nine positions ahead of the OECD average, an improvement of two rankings since last June.

Figure 5.6: OECD International Business Basket – August 2000.



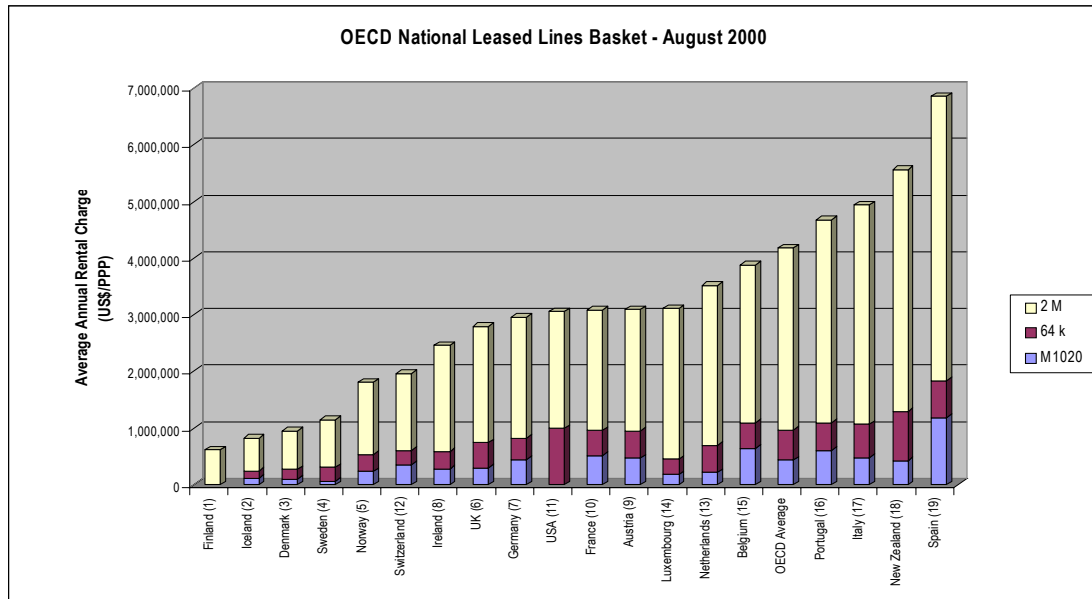
NB: The numbers in brackets represent the countries respective rankings as at June 2000

## 5.5 National Leased Lines<sup>26</sup>

Using the OECD methodology, figure 5.7 overleaf compares the cost of various countries national leased line tariffs as at August 2000. Since our last review in June, Ireland has gained one position, climbing up to 7<sup>th</sup> place, one ranking ahead of the U.K. This movement reflects the recent 16-18% reduction in national leased line prices by *eircom*. The Scandinavian countries continue to lead the way in this market, accounting for the top five rankings. Following reductions of up to 60% in its leased line tariffs, Switzerland jumps up 6 positions to 6<sup>th</sup>.

<sup>26</sup> The 'National Leased Line Basket' is based on 100 circuits distributed over 6 distances from 2 to 500 km. Results exclude VAT.

**Figure 5.7: OECD National Leased Line Basket – August 2000.**

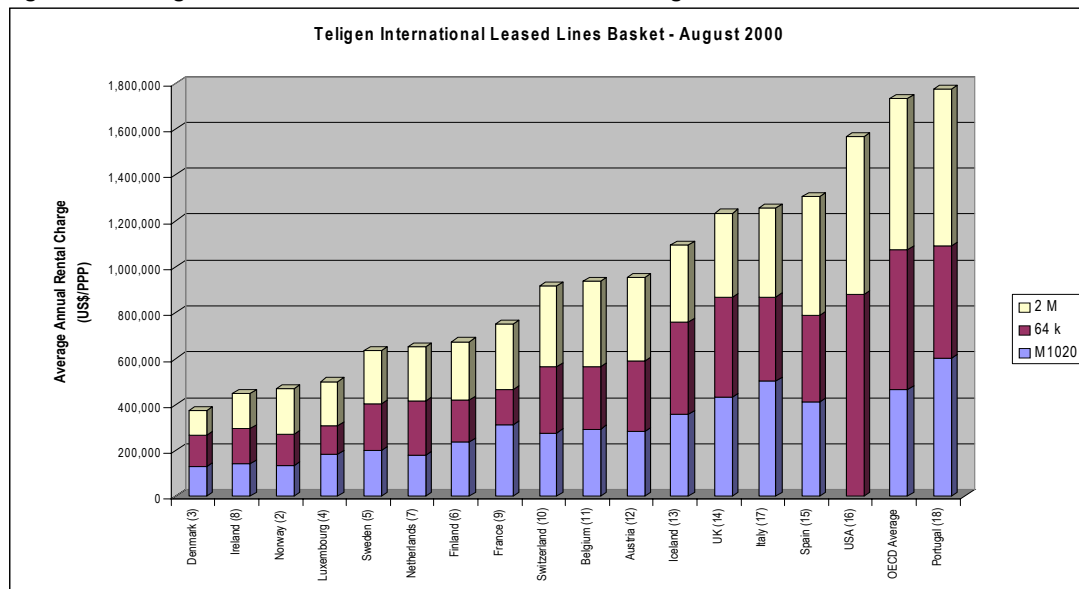


NB: The numbers in brackets represent the countries respective rankings as at June 2000

## 5.6 International Leased Lines<sup>27</sup>

Using a methodology developed by Teligen, figure 5.8 below sets out the various costs of international leased line tariffs as at August 2000. In June 2000, Ireland was ranked 8<sup>th</sup> amongst the then 18 countries surveyed<sup>28</sup>. Since then Ireland has improved significantly, rising 6 rankings from 8<sup>th</sup> to 2<sup>nd</sup> position. This improvement can in part be attributed to the roll-out of the Global Crossing high-speed link which has increased price transparency and boosted competition in this market.

**Figure 5.8: Teligen International Leased Lines Basket – August 2000.**



NB: The numbers in brackets represent the countries respective rankings as at June 2000

<sup>27</sup> The prices used for these circuits are derived from the weighted average of half-circuits to all other OECD countries, using the traffic volume weighting method proposed by Teligen.

<sup>28</sup> It was decided to omit Germany as no tariff information was available for the 64k or 2Mb circuits.

## Appendix I – List of Licensees

GENERAL LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
AUCS Communications Services (Ireland) Ltd. - formerly known as AT&T Unisource	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	VPNs, International Call Centre Solutions.
Aurora Telecom Ltd	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Budget Telecommunications Ltd	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	Indirect Access (National/International/Mobile) Services. Number Translations Services.
Cable & Wireless Services Ltd	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Customer Premises Equipment Frame Relay & ATM Freephone, Direct & Indirect Voice
Cablelink (Acquired by ntl:)	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Cable TV services
Cable Management Ireland Ltd	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Cable TV & telephony services
Carrier 1 AG	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Signal Global Telecommunications Ireland Ltd	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Colt Telecom	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Concert Global Networks Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
<i>eircom</i>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Global voice, data and internet services provider.
Eircell	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Mobile Operator
Esat Telecommunications Ltd	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Global voice, data and internet services provider.
Esat Digifone	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Mobile Operator
Esat Inland Ltd. (transferred from Post GEM)	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Internet Service Provider
Esat Net	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Internet Service Provider
Formus	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
GTS Business Services (Ireland) Ltd	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	Carrier and access services; Internet services; callcards.
IDT Europe BV Lts Liability Coolder	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Interoute Ireland Ltd	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	Residential & Business CPS Carrier Access. Prepaid Accounts and cards.

GENERAL LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
ITG Group (IRL) Ltd.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	EPOS Equipment Payphones CPS on Voice Land-Line Traffic
IXC Communications Services Europe Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
LCN-Ireland, L.L.C.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
LDMI Telecommunications of Ireland (previously known as Vianvi Ltd)	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Mastercall International Ltd	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
WorldCom	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Int'l frame relay, int'l freefone service into Ireland, Nat. & Int'l VPNs.
Meridian Communications Ltd. (formerly known as ACCess Telecom)	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	Resale of mobile telephony services
NTL (UK) Group, Inc.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Leased Lines and Broadcasting Transmission Services.
Ocean Communications Ltd	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Complete voice, data and internet service provider.
PrimeTEC UK Ltd	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Primus Telecommunications Ltd	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Princes Holdings Ltd	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Cable TV & telephony services
RSL Communications (Ireland) Ltd	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
S.M. Communications (T/A Worldlink)	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	Prepaid Services
Smart Telecom	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Startec Global Communications UK Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Stentor Communications Ltd	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	Call centre and VPN solutions Callcards
Suir Nore Relays Ltd	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Cable TV and telephony services
Swiftcall Centre	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	Indirect Access & CPS Telephony Internet & Callcard Services Call Centre Services
Tele2 Telecommunications Services Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Teleglobe Ireland Ltd	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Torc Telecom	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	Re-selling long distance domestic & international services; callcards.

GENERAL LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
Transaction Network Services Limited	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	Dial-up access for point of sales.
VarTec Telecom (UK) Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Viatel (I) Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
WTI Ireland Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Yac.com Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>

BASIC LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
Alord Holdings Ltd (T/a Switchcom) *	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	Callcards Pre-paid/Post paid residential service.
AT&T Global Network Services Ireland Ltd.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Dial up and leased line services
Broad Band Communications Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Cargo Community Systems Ltd.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	e-commerce solutions
Casey CableVision Ltd.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Cable TV Limited internet services
Conduit Enterprises Ltd	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Nat. & Int'l directory enquiry services
Energis (Switz.) AG formerly known as Unisource Carrier Services AG.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
EGN B.V.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Managed data systems & frame relay services for multinationals
Genesis Internet Service Provider Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Genuity International Inc. (formerly known as GTE Internetworking International Corporation)	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Global Crossing Ireland Ltd.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Carriers' carrier
Global One Communications Ltd.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	ATM Switching
Hiberall Ltd. *	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	Prepaid & Postpaid Services, Callcards
Indigo	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Internet Service Provider
Iridum Communications Germany GmbH.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
IXNET UK Ltd.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Limited service to banks.
Lake Communications System	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	ISDN, business solutions
MediaNet Ireland Ltd	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Internet business solutions
Next Telecom	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Reuters Ltd T/A Reuters Connect Services.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Private wire services.
Rillbank Limited	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Savvis Europe B.V.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Sonic Telecom	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Société Internationale de Télécommunications Aéronautiques	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Managed data network access services for the airline industry.



BASIC LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
TCS (Ireland) Ltd. **	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	Voice Telephony services via the Internet.
Tele Media International Ltd.	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>	✗ <input type="checkbox"/>
Timas Ltd (T/A Galileo Ireland)	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Frame relay service for travel agents
Valuetel Ltd. *	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	Re-selling long distance domestic & international services; callcards.
Web-Sat Ltd.	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	✓ <input type="checkbox"/>	✗ <input type="checkbox"/>	Internet access via satellite; SMG news services.

\* The voice service provided by these operators is purely re-sale of an existing voice telephony offering of an another appropriately licensed operator. The provision of such voice services does not constitute voice telephony as defined within the telecommunications licensing regime currently in place in Ireland.

\*\* TCS (Ireland) Ltd. provides voice telephony services over the Internet. The provision of voice services over the Internet does not fall within the definition of voice telephony as defined within the telecommunications licensing regime currently in place in Ireland.