Office of the Director of
Telecommunications
Regulation

QUARTERLY REVIEW

The Irish Communications Market Quarterly Review

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Oifig an Stiúrthóra Rialála Teileachumarsáide

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1 FOREWORD BY THE DIRECTOR

This report updates information on the Irish Communications Sector for the period January to March 2002. Overall growth has stabilised over the past couple of quarters with total revenues now standing at approximately €3.2billion per annum on an annualised basis. The mobile penetration rate stands at 77%, while Ireland continues to remain competitive in most tariff baskets.

As the ODTR approaches its 5th Anniversary the Irish Telecommunications market will have been liberalised for just over three years. Competition has transformed the market in this short period. Other licensed operators share of the fixed line market stands at 21%, commercial DSL services have been launched, cable operators are rolling out digital television services and one third of the population have access to the internet at home. Meanwhile 3G mobile licenses are due to be awarded shortly which will revolutionise the way we communicate in years to come. As technology develops new services will come on stream providing more opportunities at competitive prices for both business and residential consumers. We have only witnessed the start of what is yet to come.

Key regulatory developments during this quarter include the launching of commercial DSL, finalising prices for interconnect services provided by *eircom*, the initiation of a consultation reviewing Carrier Pre Selection in Ireland, a paper addressing new opportunities in the radio communications market for fixed wireless access (FWA), and finally the issuing of a paper focusing on the strategic management of the Radio Spectrum in Ireland.

We carried out our second broadband survey, conducted by Millward Brown Irish Marketing Surveys, in April/May 2002. The results of this survey are referred to throughout the report. The full survey will be available shortly on our website.

I would like to thank all those operators and organisations who have contributed information and comments for this review and I appreciate their efforts in facilitating the publication of this document. I continue to encourage all operators to complete the questionnaire sent to them on a quarterly basis to ensure as complete a picture as possible of the Irish market can be presented.

2 MARKET DEVELOPMENTS

The data in the review is based on returns from licensees for the period 1st January 2002 to 31st March 2002. The report is based on submissions from 42 licensees (detailed in Appendix 1) which represent approximately 99% of total market activity.

2.1 OVERVIEW

Key market indicators include:

- Total revenues for fixed, mobile and broadcasting markets at the end of March 2002 stands at an estimated €3.21billion per annum on an annualised basis, a decrease of approximately 1% since the last quarter. This figure has increased by approximately 1% since March 2001.
- The telecoms sector is now estimated to account for approximately 2.72% of Irish GDP (2001)[1] a decrease of 0.4% since the last quarter and by approximately 0.28% since March 2001[2].
- The new entrants' share of the fixed line market is approximately 21%. It is at 1% more than in March 2001.
- To date 47 General and 42 Basic licenses have been issued in the Irish market[3]. Of these, 24 General (March 2001; 25) and 19 Basic licenses (March 2001; 21) have been issued to companies who are operational in the Irish market. Three new licensees have indicated that they intend to offer WLAN services to the public.
- The Irish mobile penetration rate is now 77%, remaining the same since the last quarter[4]. The penetration rate has increased by 4% since June 2001.
- There are approximately 615,000 cable/MMDS subscribers to *basic television services* in Ireland, an increase from 613,000 last quarter. Approximately 1 million households are passed for analogue service which remains consistent with previous quarters. Approximately 650,000 households are passed for digital service, an increase of 5% since last quarter. Of the total cable & MMDS subscribers, approximately 5% had upgraded to

[1] Figure was calculated using GDP at market price (2001) – ESRI Quarterly Economic Commentary, March 2002

[2] Figures for quarters in 2001 were calculated using GDP at market prices for 2000.

[3] During the quarter a basic licence was surrendered for a general licence.

[4] Last quarter the mobile penetration rate was stated as 79%, however using revised population estimates from the CSO, last quarter's penetration rate has been restated as 77%.

digital, this figure remains the same as last quarter. There are approximately 260,000 digital cable/MMDS and satellite digital subscribers in Ireland.

- The total number of employees in the telecoms sector is approximately 16,300. The fixed, mobile and cable markets account for approximately 79%, 16% and 5% of the total figure respectively. There has been a decline of approximately 2% in this total since last quarter and by 8% since March 2001.

2.2 MARKET COMMENTARY

For the first quarter of 2002, all segments of the Irish telecommunications market show signs of stabilising. Total revenues for the fixed, mobile and broadcasting market have been levelling off over the past year, and have decreased slightly since last quarter. This decrease is mainly attributable to a reduction in the fixed line revenue together with the stabilisation of mobile revenues. The OLO market share has varied around 20% over the past couple of quarters, further evidence of stabilisation. The number of CPS lines has decreased since last quarter, showing evidence of activity within the market, with movement back to the incumbent, but also moving either from the incumbent or among CPS operators.

Internet penetration has remained relatively static over the past twelve months, while the mobile penetration rate is also showing signs of stabilising. The number of cable/MMDS households passed for digital services has increased during the quarter, while the number of subscribers to BSkyB digital satellite service continues to increase on a quarterly basis.

Ireland's position in the various tariff baskets has remained stable since out last Quarterly Report with the exception of the residential PSTN and the personal mobile basket where Ireland's position has decreased.

For the future the indications are that growth should resume given the interest in developing broadband as indicated in the survey (see section 2.3).

2.3 BROADBAND SURVEY

The ODTR commissioned Millward Brown IMS to examine the attitudes of Irish business to the provision of broadband services in Ireland. The interviews were conducted in April/May 2002 from 387 companies who use their telecommunications system for data needs; with a confidence interval of 95% (i.e. findings may range 5% either side of those noted). The respondents were selected from a sample of SMEs (58%) and large corporates (42%), with the majority of business' head offices located in Dublin.

Results of the survey reveal that ISDN and leased lines are the predominant access technology being used by Irish businesses. Strong demand for ISDN services may represent latent demand for higher bandwidth technologies such as DSL. The survey showed that DSL will be the access technology that businesses will depend more on in the future.

There is a significant amount of competition for broadband services in the Irish Market, with suppliers actively approaching businesses offering broadband services. The importance of broadband is evident with the majority of respondents believing that the use of data has changed their business. Additional bandwidth may improve company efficiency, with increased internet speeds seen as the main advantage of additional bandwidth. With the majority of companies planning to increase their bandwidth over the next twelve months, competition in the market will continue to prosper.

2.3.1 Broadband Access

As illustrated in table 2.1, ISDN and leased lines are the predominant broadband access technologies that companies have at present

Table 2.1: Types of broadband access companies have at present

Broadband Access	*Present*
ISDN	68%
National Leased Lines	53%
International Leased Lines	25%
WLAN	14%
Cable	5%
FWA	2%

In the future companies will depend on higher bandwidth services such as DSL and WLAN's as illustrated in table 2.2 below.

Table 2.2 Some of the broadband services that companies will depend more on in the future:

Service	*Future*
DSL	47%
WLAN's (802.11)	34%
ISDN	33%
Optical	27%
Cable	17%
Satellite	16%
FWA	10%

A significant proportion of businesses that have broadband access have either upgraded or introduced their broadband requirements in the last twelve months. Over a third of businesses have upgraded or introduced their ISDN access, and almost two in five have upgraded or introduced their Wireless LAN access in the last twelve months.

The survey indicated that broadband access is important for companies who have employees that use remote access. With over two thirds of businesses using remote access, to some degree, teleworking is clearly becoming widespread. Increased data rates may benefit employees who wish to download files or access the Internet outside the office.

2.3.2 Competitive Environment

The survey suggests that there is a significant amount of competition for broadband services in the Irish Market. Suppliers are actively approaching businesses offering broadband services, with two thirds of companies stating that they have been approached by a supplier other that their existing one, within the past twelve months.

Although suppliers are actively approaching companies, the majority of Irish businesses (84%) have not switched their supplier in the last 12 months. The main reason given by those

who did not switch supplier was that they were happy with the service currently received from their existing supplier (42%).

Almost three quarters of businesses are aware that a Service Level Agreement (SLA) is available from their supplier, whilst almost three in five businesses claim to have a Service Level agreement with their supplier.

2.3.3 Awareness

Most companies consider themselves to be well informed on the various issues involved in acquiring broadband communications as illustrated in table 2.3.

Table 2.3 Ability to determine the needs of company in terms of broadband access

Statement	*Agree*
Do you believe you are able to understand and compare different technology options from different operators	84%
Do you believe you are able to compare different broadband services in terms of price	85%
Do you believe you are able to determine the needs of your company in terms of broadband access and services required	90%

2.3.4 Broadband Usage

As illustrated in table 2.4, nearly all of the companies use Internet and e-mail on a regular basis.

Table 2.4: Main services / facilities used by businesses on a regular basis

Services/Facilities	*2002*
Email	99%
Internet	98%
Fast file transfer	51%
Business to business e-services	34%
Video conferencing	27%

Table 2.5 illustrates that the main purpose of broadband is inter-company data transfer.

Table 2.5 The main purposes of broadband as indicated by respondents:

Main Purposes of Broadband	*2002*
Inter-company data transfer	65%
Company website	35%
E-commerce transactions	27%
E-mail	21%
Web browsing/general internet interests	19%
Video Conferencing	12%

Increased speed of internet functions is the most widely mentioned advantage of having additional bandwidth, mentioned by over three in five businesses. Other advantages include increased efficiency/availability/reliability, improvement and expansion of computer based aspects of their business, increased capacity and more line access with less congestion.

When asked whether the use of data has changed their business, 77% feel that the use of email and internet has changed their business.

2.3.5 Difficulties experienced and future requirements

When asked what they feel are the major infrastructural difficulties with service to their regional points of operation, inadequate bandwidth is singled out as the most widespread problem for businesses. Other issues mentioned are service levels from telecommunications companies, the range and price of services offered and the lack of an alternative supplier. Of those who had difficulties accessing broadband services, 35% believed that the difficulties had impacted the investment decisions in terms of where they decided to locate their points of operation.

The importance of additional bandwidth for Irish businesses is evident as the majority of companies (61%) anticipate that their broadband requirements will change over the next twelve months; almost a quarter of businesses believe they will need 'a lot more' and a further two in five envisage needing 'a little more' access.

Around half of businesses plan to upgrade their bandwidth requirements further, primarily to accommodate the increase in use, mentioned by 29% of businesses but also for the purpose of increasing speed (of access/data transfer/web/e-mail).

2.3.6 General Attitudes

Around 44% believe that Ireland's competitiveness in supplying broadband telecommunications services has improved in the past twelve months, while 21% believe that there has been no change.

A number of key measures are considered for Ireland to become an e-commerce hub for Europe, such as improving and stepping up investment in the national infrastructure, providing nationwide access to new and improved broadband services, and reducing prices, are considered essential in installing Ireland as an e-commerce hub in Europe.

Table 2.6 Attitudes to the Competitiveness of the Market

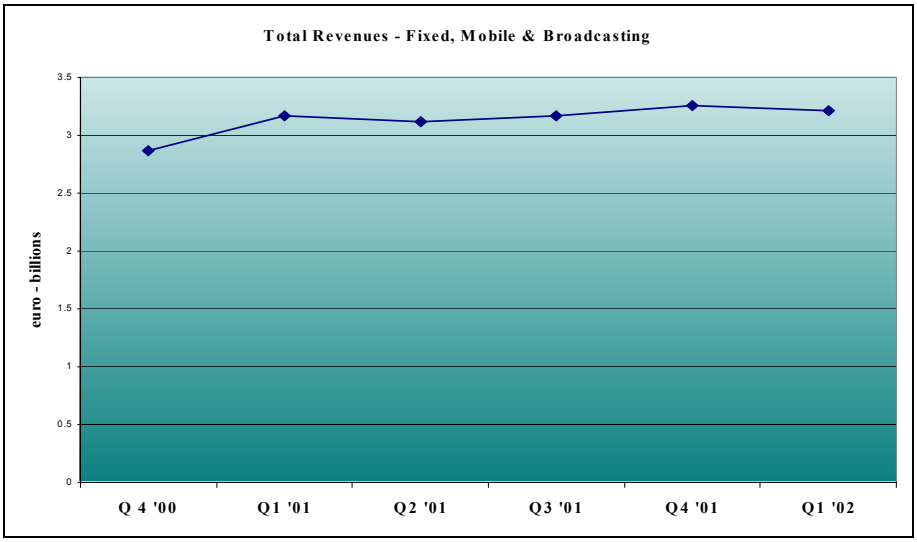
Statement	*Agree*
My broadband telecommunications needs are well served	46%
I have telecommunications needs that are not currently being met and are hindering growth and development	31%
I believe that there are savings to be made by changing my telecommunications supplier	47%
The overall cost of my telecommunications spend has reduced in the last twelve months	32%
I am more satisfied with my telecommunications supplier than 12 months ago	36%
I believe that the telecommunications market is more competitive than 12 months ago	51%
I believe that the limited availability of bandwidth products is a key constraint to the growth of my business	41%

All figures and statements expressed in this review seek to reflect developments in the Irish market since the ODTR's last quarterly report. 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.

3 FIXED LINE MARKET

Total revenues for fixed, mobile and broadcasting markets now stand at an estimated €3.21 billion per annum on an annualised basis. This figure has increased by approximately 1% since March 2001. It can be seen from figure 3.1 below that the majority of this growth was early in the year with revenues stabilising over the last couple of quarters. The telecoms sector is now estimated to account for approximately 2.72% of Irish GDP (2001[5]).

Figure 3.1 Total Revenues - Fixed, Mobile & Broadcasting



Source: ODTR Estimates

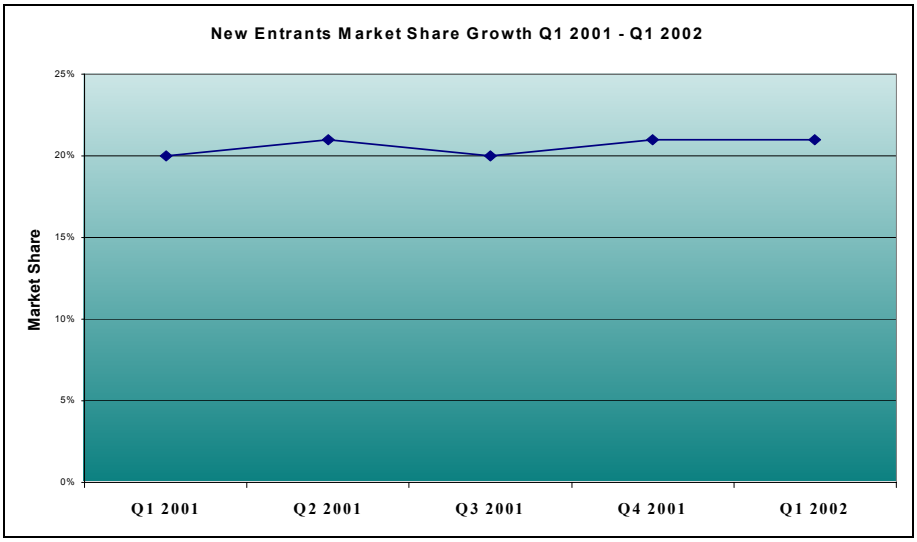
Total fixed line revenue[6] for the quarter to the end of March 2002 was approximately €500 million, accounting for approximately 62% of total telecommunications revenue.

[5] Figure was calculated using GDP at market price (2001) – ESRI Quarterly Economic Commentary, March 2002

[6] This figure includes revenue from retail traffic (local, national, international, mobiles, internet, payphone & other) Internet services, leased lines, switched data services and other services such as directory publication & maintenance of customer equipment. Data based on operator returns.

As can be seen in figure 3.2, the market share of OLOs now stands at approximately 21%.

Figure 3.2: OLO Market Share



Source: ODTR Quarterly Review Questionnaire

3.1 CARRIER PRE SELECTION

The number of CPS[7] lines[8] has decreased by 3% since our last quarterly report. As at the end of March 2002, there were approximately 140,000 lines, including both residential and business customers. There is evidence of activity within the market; with significant numbers of subscribers moving back to the incumbent, but also moving either from the incumbent or among CPS operators.

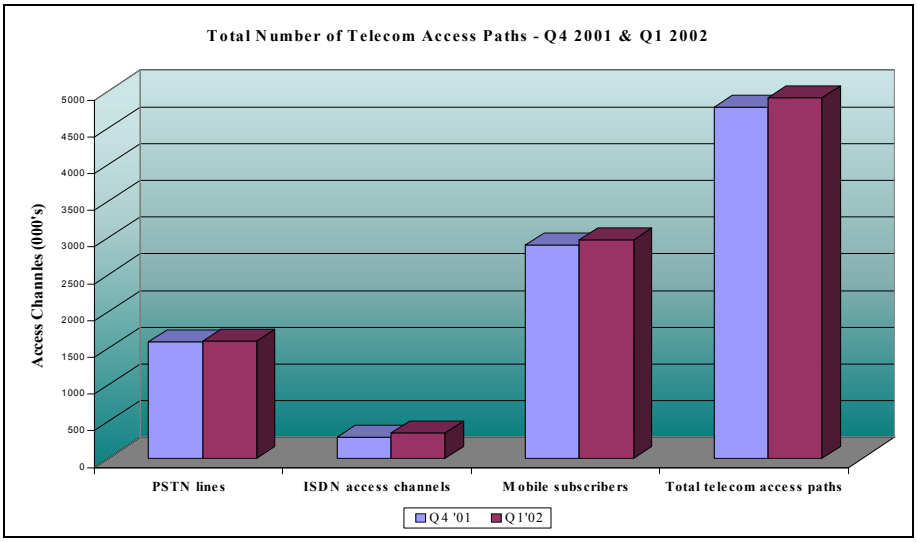
3.2 TELECOM ACCESS PATHS

The total number of telecom access paths at the end of the quarter was 4.913 million. This figure has increased by approximately 8% since March 2001. The increase is mainly attributable to the increase in mobile and ISDN subscribers.

[7] 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.

[8] CPS figure was previously referred to as "subscribers" - the correct term is lines.

Figure 3.3: Telecom Access Paths



Source: ODTR Quarterly Review Questionnaire

3.2.1 PSTN Lines

The total number of PSTN lines has remained relatively constant. The total was just over 1.6 million lines[9] at the end of March 2002.

3.2.2 ISDN Access Channels

As at the end of March 2002, there were approximately 343,000 ISDN access channels. (See Figure 3.5 in Data Communications)

3.2.3 Mobile Subscribers

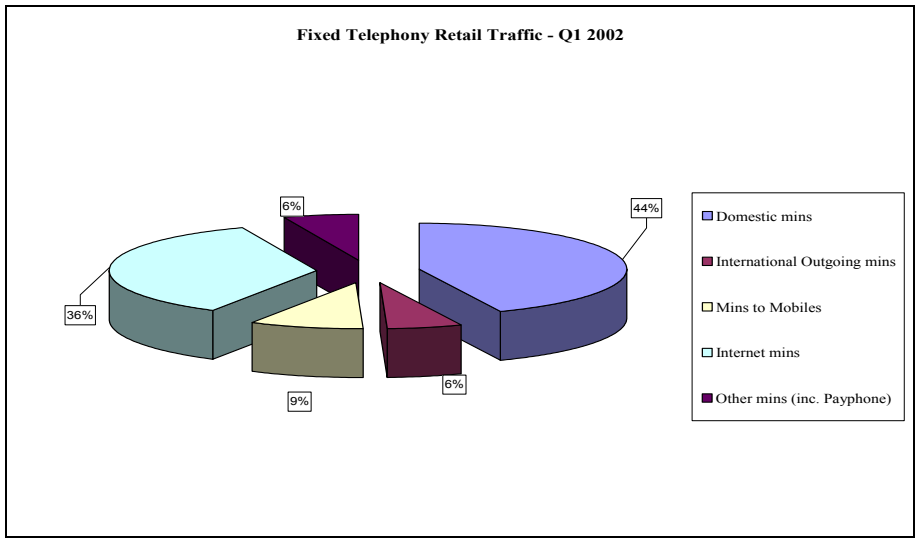
The number of mobile subscribers has increased to 2.97 million at the end of March 2002. Mobile lines account for nearly 60% of the total access paths.

[9] The figure for PSTN is the number of lines as opposed to access channels which would report a marginally higher figure.

3.3 RETAIL TRAFFIC

Fixed Telephony Retail traffic measured in minutes has increased by approximately 6% since December 2001.

Figure 3.4: Retail Traffic



Source: ODTR Quarterly Review Questionnaire

As a proportion of total retail traffic, domestic minutes remains the highest followed by Internet traffic. This remains stable with last quarter and twelve months ago[10].

Table 3.1: Fixed Services offered in the residential markets

Operator	*International*	*Long Distance*	*Local*
Chorus	***Y***	***Y***	***Y***
Eircom	***Y***	***Y***	
Esat Telecom	***Y***	***Y***	***Y***
Hibercall	***Y***	***Y***	***Y***
Ntl	***Y***	***Y***	***Y***
Rillbank Ltd t/a Direct Dial Telecom	***Y***	***Y***	***Y***
SM Communications	***Y***	***Y***	***N***
Smart Telecom	***Y***	***Y***	***Y***
Swiftcall	***Y***	***Y***	***Y***
Switchcom	***Y***	***Y***	***Y***

[10] There has been a shift in proportions since last quarter due to a reclassification of 'Other' & 'Internet' minutes by an operator.

3.4 DATA COMMUNICATIONS

3.4.1 Leased Lines

The delivery of leased lines is of critical importance to the development of competition, particularly as operators can be constrained in their ability to offer a credible level of service to their customers if they do not have certainty over the quality and timely delivery of service provided to them by SMP operators.

Table 3.2 illustrates the rolling three month average delivery time for leased line circuits ordered by OLOs for February, March and April. The average delivery times for January 2002 were between 15 and 26 days. This figure has reduced to 19 days for Sub 2Mbit Lines and increased to 24 days[11] for 2 Mbit Lines with an average delivery time of 20 days for all Leased Lines[12].

Table 3.2: Rolling Three Month Average Delivery Time for Leased Line Circuits Ordered by OLOs (Working Days)

	Feb 2001	*Mar 2001*	*Apr 2002*
All Leased Lines	*20*	*20*	*20*
Of Which:			
Sub 2Mbit Lines	*22*	*20*	*19*
2Mbit Lines	*13*	*19*	*24*

On the basis of the March 2002 quarter statistics, the total number of leased line circuits remained relatively constant at approximately 39,000.

3.4.2 ISDN Access Channels

The number of ISDN access channels[13] has increased from approximately 287,000 at the end of December 2001 to approximately 343,000 access channels at the end of March 2002, which represents an increase of approximately 19%. The number of ISDN access channels has increased by approximately 52% since March 2001. ISDN now accounts for 7% of the total access paths.

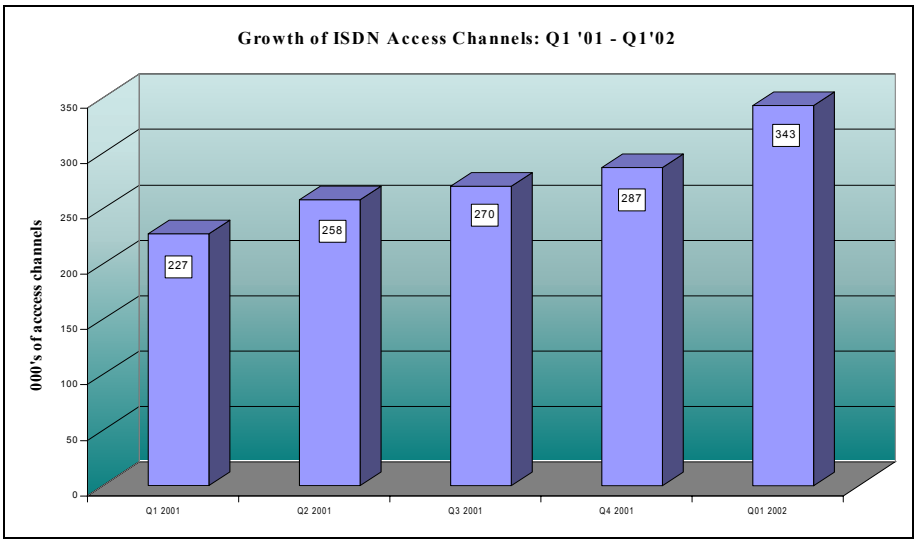
[11] The increased delivery figure in April for 2Mbit Lines is impacted by the provisioning of a small number of long outstanding circuits.

[12] 1) Delivery lead-time is shown for 100% of orders delivered in the period 2) Sub 2mb deliveries include digital circuits with transmission speeds of less than 2mb. 3) The statistics provided relate to orders from other licensed operators only. 4) Other interconnect circuits are not included in the statistics.

[13] The figure for total ISDN access channels includes basic rate ISDN, which is 2 voice channels, primary rate which is 30 voice channels and fractional rate ISDN which is in between the number of basic and primary rate voice channels.

The proportion of primary, basic and fractional rate ISDN is 53%, 42% and 5% respectively of the total number of ISDN access channels.

Figure 3.5 ISDN Access Channels



Source: Quarterly Review Questionnaire

3.4.3 Digital Subscriber Line (DSL)

During the quarter, commercial DSL services were launched by both *eircom* and Esat. The introduction of competitive broadband DSL services will provide significant benefits to Irish users in terms of enhanced service offering and competition. Both companies have indicated that products aimed at the residential market are under consideration for later in the year. DSL is a technology that allows higher capacity communications including high speed internet access over conventional telephone lines. The higher capacity provides for greater speed in transferring data. These developments result from firstly *eircom* revising pricing proposals for its bitstream offerings and secondly the culmination of Esat's LLU initial roll – out, with commercial services now available in Limerick and Ballina, with a further 38 centres to follow in coming months.

Arrangements have been made by *eircom* to ensure that competitors have access to the necessary complementary services to launch bitstream services[14]. Legal proceedings which were launched by *eircom* in 2001 against ODTR decisions in relation to LLU have been discontinued.

[14] *Eircom's* Wholesale Bitstream Reference Offer – Information Notice, ODTR doc 02/37

3.5 REGULATORY DEVELOPMENTS

3.5.1 Fixed Wireless Access

A response[15] to the consultation document addressing new opportunities in the radio communications market for fixed wireless access (FWA) was published recently. The purpose of the consultation[16] was to identify the best basis for future licensing of FWA in Ireland to encourage the roll-out of FWA services, in the light of changing market conditions. FWA provides a flexible resource enabling the provision of broadband on a widespread basis.

After reviewing the position, the ODTR proposes to offer new opportunities to the market. These include the introduction of a licensing process for local area FWA systems using spectrum in the 10.5 GHz frequency band and provision for license exempt access networks in the 5.8 GHz frequency band at substantially increased power levels. The rationalisation of the FWA spectrum provides greater flexibility for operators in rolling out broadband wireless services in the 26 GHz band both now and in the future.

These initiatives will complement the existing provisions for FWA in Ireland, both licensed and license exempt under the Wireless Telegraphy Acts 1926-1988, and in particular will provide new opportunities for local or community based provision of broadband access services.

3.5.2 Interconnect

The Reference Interconnect Offer sets out *eircom's* stall of interconnection services for OLO's and the charges for those services. These services are priced on a Long Run Incremental Cost (LRIC) basis, the framework for which was developed within an industry working group under the auspices of the ODTR. *eircom* has developed a LRIC model for the calculation of charges.[17] LRIC pricing is devised to give a return which provides for updated investment in the network, and excludes provision for inefficiencies. *eircom* submitted new pricing for periods up to 31st March 2001 based on its model and taking account of the industry group conclusions on methodology. These were approved by the ODTR. Legal proceedings which were launched by *eircom* against ODTR decisions in relation to interconnect rates have been discontinued.

[15] Expanding Opportunities in the Radiocommunications Market: Fixed Wireless Access (FWA) – Response to Consultation: ODTR doc. 02/49 (www.odtr.ie/docs/odtr0249)

[16] Expanding Opportunities in the Radiocommunications Market: Fixed Wireless Access (FWA) – Consultation Paper: ODTR doc. 02/19 (www.odtr.ie/docs/odtr0219

[17] This model reconciles with the industry advisory group model. A report will be issued shortly on the reconciliation of the two models.

3.5.3 CPS

Carrier Pre Select (CPS) is a key enabler for the development of competition in telecommunications. During the quarter, two papers in relation to CPS were issued. In response to concerns raised by a number of operators, an investigation into CPS call quality was commissioned by the ODTR, which resulted in the publications of a CPS Call Quality Summary Report[18]. The results of the investigation are included in the report, and they clearly indicate that the quality of calls made using CPS services is to a high standard and comparable to any direct access service in Ireland today.

A consultation on CPS was issued in May 2002[19]. CPS has been available in Ireland for over two years; however this is the first major reviewing of the operational and technical aspects of the CPS process. As part of this review, the ODTR has been examining the situation in other European countries where CPS has significantly higher penetrations than in Ireland. To date, no significant differences between the Irish CPS regulatory, commercial or operational frameworks have been identified. Specific questions relating to issues raised by the industry are dealt with in the paper along with new initiatives that the ODTR believes may further improve CPS for the customer.

3.5.4 Price Cap

The principal purpose of price capping is to protect consumers from the high prices that might result in the absence of competitive constraints. It also encourages greater efficiency in the provision of services by the operator concerned. Following a review of information supplied by *eircom*, the ODTR is satisfied that *eircom* has complied fully with the price cap (2001) imposed upon them under Telecommunications Tariff Regulation[20]. Within the overall price cap *eircom* may increase tariffs for certain services, provided that the increases do not exceed inflation in the previous year plus 2%. *eircom* has complied with this requirement. To protect the most vulnerable users who make few calls, the Tariff Regulation places an additional requirement on *eircom* not to increase the average bill of low volume user (bottom quartile) by any more than inflation in the previous year. Again, *eircom* complied with this requirement.

3.5.5 Service Levels

Service Level Agreements (SLAs) set out the minimum service quality standards which *eircom* must meet when providing services to other operators. Standards include committed

[18] CPS Call Quality Summary Report – document no. 02/41

[19] Carrier Pre Selection in Ireland – Consultation Paper, document no. 02/47

[20] Price Cap on eircom 2001 – Decision Notice D7/02, document no. 02/42

delivery and fault repair timeframes along with penalties for failure to meet the targets. A revised regime[21], is targeted for introduction in July 2002, under which *eircom* has committed to delivering 95% of leased lines by their promise date.

[21] Service Levels Provided to Other Licensed Operators by Operators with Significant Market Power - Decision Notice: ODTR doc. 02/28 (www.odtr.ie/docs/odtr0228.doc).

4 MOBILE COMMUNICATIONS

The Irish mobile penetration rate now stands at 77%[22]. There has been no change in the mobile penetration rate since our last review.

Figure 4.1 Irish Mobile Penetration Rate: Q1 '00 – Q1 '02

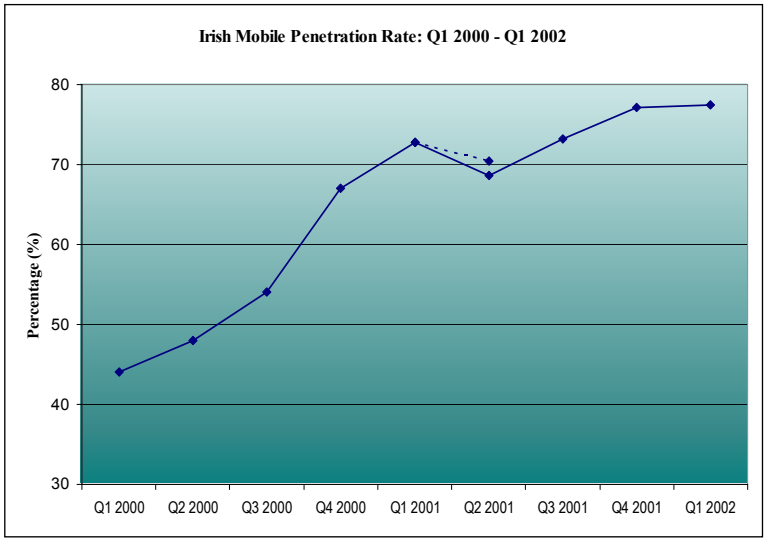


Figure 4.1 illustrates the Irish mobile penetration rate since Q1 2000. The penetration rate has increased by 4% from Q1 2001 to Q1 2002.

Source: ODTR Estimates and FT Mobile Communications

With approximately 2.97 million mobile subscribers, the three mobile operators in the Irish market - Vodafone, 0_2 [23], and Meteor - now have 57%, 40% and 3% market share respectively[24].

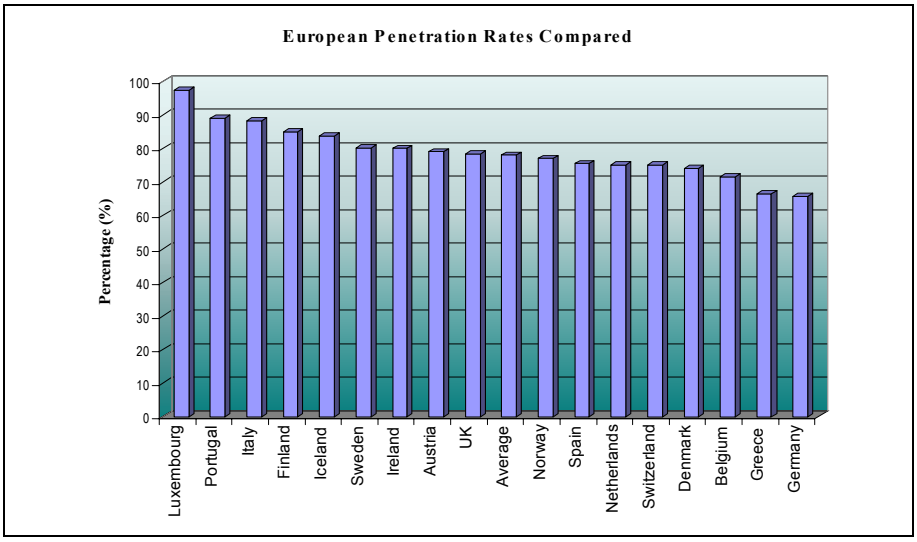
[22] Population estimated at approximately 3.84m, CSO Population and Migration estimates April 2001. The mobile penetration rates for Q2 2001 – Q1 2002 have been adjusted reflecting this new population figure. The decrease in the penetration rate from Q1 2001 to Q2 2001 is attributable to the adjusted population figure and the recalculation as to what constitutes an active pre-paid subscriber. The September 2001 Quarterly Market Review details the adjustments made as to what constitutes an active pre-paid subscriber.

[23] Digifone rebranded as 0_2 on 30th April 2002

[24] Source: ODTR Quarterly Review Questionnaire

Figure 4.2 illustrates various European mobile penetration rates. Ireland has the 7th highest penetration rate in Europe, lying three places ahead of the European average, and two places ahead of the UK.

Figure 4.2 European Penetration Rates



Source: FT Mobile Communications, April 2002

4.1 DATA SERVICES

4.1.1 SMS

The number of SMS messages sent continues to grow strongly with over half a billion sent during the quarter. On average, mobile users send 62 SMS messages per month, representing an increase of approximately 20% on the previous quarter.

Figure 4.3 Number of SMS sent Q1 2000 – Q1 2002

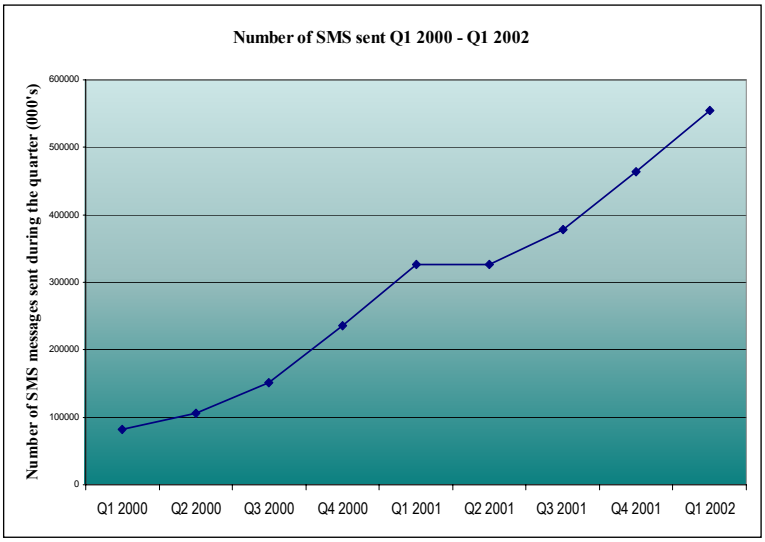


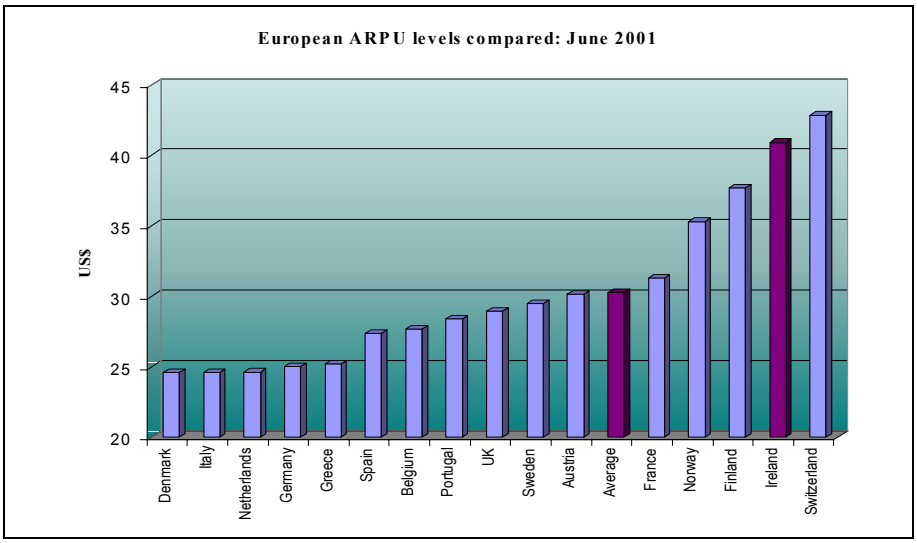
Figure 4.3 illustrates the number of SMS messages sent since Q1 2000. There has been a 70% increase in the number of SMS sent from Q1 2001 to Q1 2002.

Source: ODTR Quarterly Review Questionnaire

4.2 AVERAGE REVENUE PER USER (ARPU)

Figure 4.4 illustrates mobile ARPU levels in key European countries. Irish mobile operators have among the highest ARPUs in Europe.

Figure 4.4: European ARPUs compared



Source: Yankee Group

4.3 REGULATORY DEVELOPMENTS

4.3.1 3G

During the quarter three companies applied for 3G mobile licenses. The incumbent operators Vodafone and 0_2 applied for A and B licenses, while Hutchison Whampoa applied for the A license[25].

[25] The A license provides for 80% population coverage and potentially extra spectrum to cover Mobile Virtual Network Operator Services. The B license provides for a minimum coverage of the five major cities (53%). Bidders for the A license are invited to offer access to Mobile Virtual Network Operators (MVNO's).

4.3.2 Mobile Termination Rates

Mobile operators, Vodafone and 0_2, have recently announced reductions in their mobile termination rates (MTR). The MTR is the rate at which mobile operators charge other fixed and mobile operators for a call from their networks to be completed on the mobile network. The new average rate for Vodafone is 12.6 cents and for 0_2 12 cents with effective dates of 1st June and 1st July respectively. The average rate in the EU is currently 16 cents. Irish rates therefore are favourable compared to other EU countries. In addition, consumers will benefit from these new lower charges for termination on mobile networks. The ODTR encouraged operators to reduce rates and looks forward to working constructively with the mobile operators on accounting separation and the development of an appropriate cost model for MTRs.

5 INTERNET

5.1 RESIDENTIAL

At the end of April residential Internet penetration in Ireland was estimated at 34%[26]. The penetration rate has increased by 1% since January 2002[27].

Figure 5.1 Irish Internet Penetration Rate

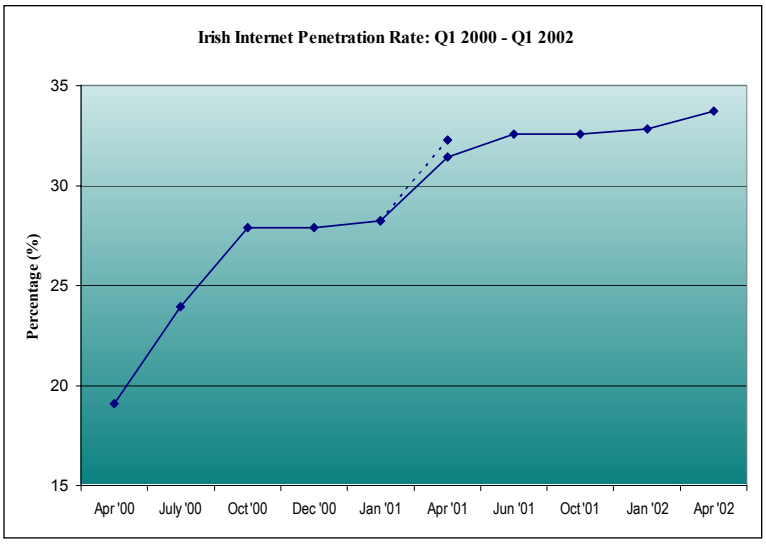


Figure 5.1 illustrates the Irish Internet penetration rate since April 2000. The Internet penetration rate has stabilised from April 2001 to April 2002.

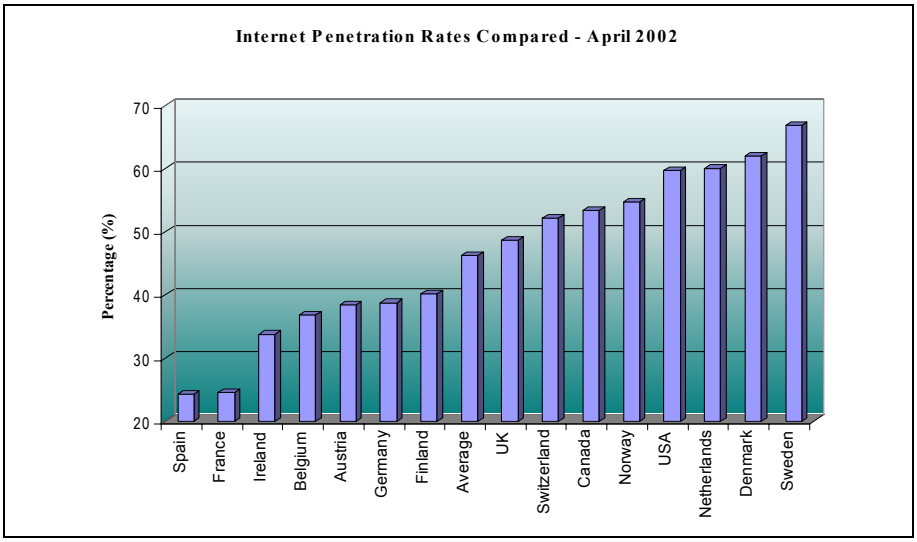
Source: Nielsen NetRatings

[26] Nielsen NetRatings Current Internet Universe (i.e. penetration): All individuals 2+ who have accessed the Internet from home.

[27] The Internet penetration rates have been adjusted back to April 2001 reflecting the new population estimate of 3.84 million from the CSO's Population and Migration estimates, April 2001.

Figure 5.2 compares Ireland's Internet penetration rate to some key countries Worldwide[28]. Internet penetration in Sweden is the highest, with 67% of the population having Internet access at home.

Figure 5.2 Internet Penetration Rates Compared



Source: Nielsen NetRatings and CIA World Fact book[29]

Results from the ODTR's recent consumer survey showed 39% of those who do not have access to Internet at home were not interested in going on line. Perhaps greater awareness of relevant content may increase the numbers accessing the Internet from home.

[28] Figures are correct as at April 2002, except for Canada and the USA which are for March 2002.

[29] Population figures are taken from the CIA World Fact book, and are estimates at July 2001.

Table 5.1 illustrates the most frequently accessed websites by residential Internet users in Ireland. Three of the top ten sites visited by Irish households were Irish[30]. It appears that those who are accessing the Internet from home are primarily visiting sites that can be used for e-mailing. However, five Irish websites/portal which included Ireland.com, Ryanair.com, Bank of Ireland's 365online.com, AIB's 24hour-online.com and Indigo.ie, were represented in the eleven to twenty rankings.

Table 5.1: Top Web Sites by Domain in Ireland

Domain	*Unique audience*	*Reach % Active*
msn.com	*294,208*	*48.25*
yahoo.com	254,032	41.66
passport.com	208,636	34.22
eircom.net	179,796	29.49
google.com	169,620	27.82
microsoft.com	163,359	26.79
yahoo.co.uk	138,933	22.78
iol.ie	109,440	17.95
geocities.com	83,181	13.64
oceanfree.net	79,966	13.11

Source: Nielsen NetRatings, April 2002

According to Nielsen's Internet figures (see table 5.2), the active Internet Universe in Ireland has remained at 16% since our last review[31]. The active Internet universe refers to the number of people who have access to the Internet at home and have used it during the month.

The average home user spent just under 4 hours online in April 2002, consistent with previous reviews.

Table 5.2: Average Internet Usage for Ireland, the UK, and the US, April 2002.

	United States	*Ireland*	*United Kingdom*
Number of Sessions per Month	22	9	14
Number of Unique Sites Visited	48	28	40
Time Spent per Site	n/a	12:04	20:19
Time Spent per Month	11:51:11	3:48:17	6:45:32
Time Spent During Surfing Session	32:25	26:06	30:02
Duration of a Page viewed	00:54	00:44	00:49
Active Internet Universe	106,728,225	609,775	16,551,333
Current Internet Universe Estimate	166,007,688	1,295,522	28,995,205

Source: Nielsen NetRatings, April 2002

[30] Measured by unique audience; i.e. the number of people who have gone to the site at least once in the defined time period.

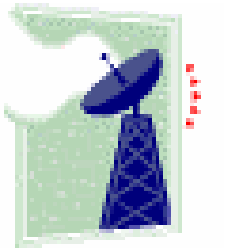
[31] All individuals 2+ who accessed the Internet from home i.e. usage

5.2 BUSINESS

As expected, business Internet penetration is substantially higher than residential Internet penetration. Results of the Millward Brown IMS Broadband survey reveal that 98% of Irish businesses use the Internet on a regular basis. Highlighting the importance of the Internet for Irish business, increased speed of Internet functions was outlined by approximately three in five companies as the main advantage of broadband.

When companies were asked what purpose they used broadband for 35% responded for their company website, while nearly three in ten identified e-commerce transactions as the main purpose of broadband.

6 CABLE & MMDS & SATELLITE

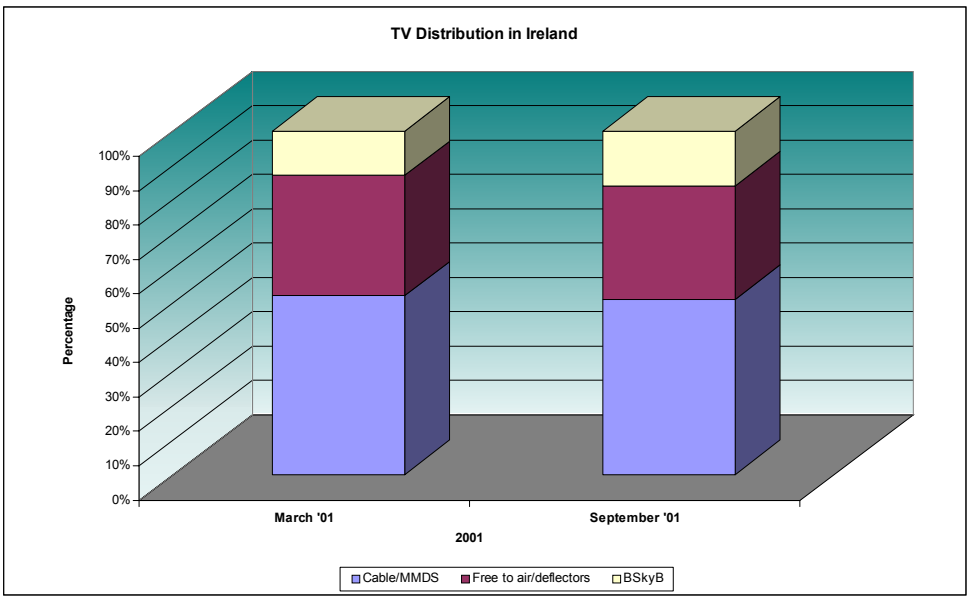


At the end of March 2002, the ODTR estimates that there were approx. 615,000 cable & MMDS subscribers in total to *basic television services* in Ireland. This figure has increased slightly since last quarter from 613,000. At the end of March 2002, 5% of this total had upgraded to digital. There are now approximately 260,000 digital cable/MMDS and satellite digital subscribers in Ireland, representing 20% of all households with a television. Approximately 1 million households are passed with 65% of these passed for digital services.

Total cable & MMDS revenues have increased by approximately 16% since last quarter[32]. Employees in the sector at the end of March 2002 were 880, a decrease of approximately 12% since December 2001.

At the end of April 2002, it is reported that there were over 232,000 subscribers[33] to BSkyB. This figure has increased by approximately 5% since December 2001. Figure 6.1 illustrates the TV distribution in Ireland between free to air / deflectors, cable / MMDS and BSkyB[34].

Figure 6.1 - TV Distribution in Ireland



Source: Operator returns and Electric News

[32] Reflecting price increases approved last autumn and the restructuring of audit control departments.

[33] Source: Irish Times – 11th May 2002

[34] Figures are based on CSO estimate of 1.3 million households with a television.

7 CONSUMER FOCUS

7.1 INTERNATIONAL ROAMING

Results of a consumer survey carried out by the ODTR in conjunction with OFTEL, the UK regulator showed that consumers lacked awareness of the high cost associated with using their mobile abroad[35]. The results of the survey revealed that consumers are generally dissatisfied with international roaming costs. Some of the principal findings are outlined below:

- 43% of consumers did not know how much it costs to use a mobile phone while abroad even though consumers can pay up to € 1.90 per minute calling home from the UK on a pre paid tariff.
- Only 15% of consumers were satisfied with overall value for money for making calls while abroad.
- Over half of consumers (51%) were dissatisfied with the cost of receiving incoming calls while abroad.
- Less than one third of consumers have tried to reduce their international roaming charges by using options such as text messaging rather than making voice calls.

In light of these results the ODTR published some advice for consumers as to how best to manage their mobile usage when abroad[36]. Some of the advice given to consumers ranged from changing from a pre-pay service to post-pay contract, manually selecting the least expensive UK network and sending SMS messages instead of making calls.

The benchmarking report outlined possible savings for a range of users, i.e. business trip, holiday maker, daily commuter, and an occasional visitor. Consumers can minimise international roaming costs by assessing their individual usage pattern and deciding what option suits their needs, and by checking with their network operator before they travel to know exactly how much they will be charged for calls.

[35] ODTR Doc 02/33 "Consumer awareness of mobile roaming – A report by the ODTR, part of a joint ODTR/OFTEL study on mobile roaming"

[36] ODTR Doc 02/34 "Benchmarking study and consumer advice on mobile roaming between Ireland and the UK – a report by the ODTR, part of a joint ODTR/OFTEL study on mobile roaming"

8 TECHNOLOGY DEVELOPMENTS

A key aspect of the ODTR role is to raise awareness of new telecommunications technologies in the ICT sector. To this end, two notes were published as part of the Briefing Note series during the quarter.

The first of these Briefing Notes is on the topic of Optical Access[37] i.e. using optical fibre or wireless optical systems to provide 'last mile' or local loop connections. The high information carrying capacity of optical signals means that optical access constitutes a very high bandwidth alternative to other access technologies such as ADSL over copper, fixed wireless access and satellite connections. Indeed, optical transmission technologies may be a prerequisite for some of the new and emerging bandwidth-intensive applications that are being developed in fields as diverse as education, medicine, research and entertainment.

The second Briefing Note, Potential Applications for Next Generation Networks[38], is a follow up to the Next Generation Networks briefing note[39] that was issued in November 2001. This note sets out a range of potential changes in technologies and a range of broadband and narrowband applications that could influence the development of next generation networks. Applications are described in areas such as Government, education, medicine, research, business and entertainment among others. Some of the applications described in this briefing note are already available in Ireland. However the likelihood of their wider adoption, and the cumulative effects that this could have on telecommunications infrastructure, is something that needs to be highlighted and carefully considered. This paper is intended to develop the debate rather than to outline conclusions.

The radio spectrum is a finite national resource, and its management has an important role to play in developing the national communications infrastructure. This involves forward planning and careful consideration of the implications of spectrum allocation to ensure that opportunities are not foreclosed or inadequately catered for, and that spectrum is assigned and used efficiently. On 2nd May 2002, the ODTR published a paper focusing on the Strategic

[37] Optical Access – Briefing Note: ODTR doc. 02/29 (www.odtr.ie/docs/odtr0229.doc)

[38] Potential Applications for Next Generation Networks – Briefing Note: ODTR doc. 02/45 (www.odtr.ie/docs/odtr0245.doc)

[39] Next Generation Networks – Briefing Note: ODTR doc. 01/88 (www.odtr.ie/docs/odtr0188.doc)

Management of the Radio Spectrum in Ireland[40]. This paper has been carefully prepared following rounds of public consultation on the current and future demand for spectrum

The spectrum management programme is largely about allocation issues, that is the allocation of spectrum to particular uses (e.g., mobile, broadcasting, etc.), rather than about assignment of individual frequencies to specific users. The ODTR approach means that, where possible, access to spectrum should be license exempt, and the ODTR favours the development of services which can operate without affecting other users in shared spectrum. Where specific assignment of spectrum is necessary and there is substantial availability of spectrum, it will generally be assigned on a first come first served basis. However, there are a number of key bands for which there is heavy demand in some areas and the ODTR intends to introduce administrative pricing to deal with this congestion in a fair way. Where it is necessary to limit the number of licenses, competitions need to be held. In order to encourage innovation and development, the ODTR also operates a test licence regime, which manufacturers and operators may use to test the technical capabilities of equipment.

[40] Strategic Management of the Radio Spectrum in Ireland – ODTR doc. 02/43 (www.odtr.ie/docs/odtr0243.doc)

9 POSTAL REGULATION

Following a consultation on the subject, the ODTR approved An Post's proposal to increase the basic price to deliver a standard sized letter anywhere in Ireland or Britain by 3c to 41c[41]. The new price covers all Post Office Preferred (POP) letters; until now the basic price only applied to standard letters weighing up to 25g. The effect of this change is that the price of the stamp has been reduced for about 10% of all letters. Table 9.1 below illustrates the price increase which was implemented by An Post on 2nd April 2002.

Table 9.1 Price Increase for POP sized Letters

	Ireland (32 Counties)		*Britain*	
Weight not over	**Old Rate**	**New Rate**	**Old Rate**	**New Rate**
25g (including postcards)	€0.38	€0.41	€0.38	€0.41
50g	€0.44	€0.41	€0.51	€0.41

An Post also implemented tariff increases for POP sized letters weighing up to 25g addressed to European addresses and for larger envelopes and packets to Irish and British destinations. Approval of price increases for Direct Mail Services was deferred to enable An Post to submit revised proposals. A 3c surcharge was approved while these proposals were being prepared.

Following a review of the implementation of the Postal Directive [97/67/EC], in 2000 the European Commission proposed an amending Directive with regard to the further opening to competition of community postal services. In March 2002, the European Parliament approved the Recommendation for Second Reading of the amending Directive 97/67/EC and in April the revised text was approved by the Council of Ministers. Transposition of the amending directive will be completed no later than 31 December 2002.

During the quarter the International Post Corporation (IPC) published their annual results for 2001 on the quality of service of international mail within Europe[42]. Results show a deterioration in performance since 2000, as Table 9.2 illustrates.

[41] Application by An Post to increase the price of reserved Postal Services – Response to Consultation: ODTR doc. 02/32 (www.odtr.ie/docs/odtr0232.doc)

[42] See www.ipc.be/documents/2001_UNEX_Results.pdf

Table 9.2: IPC Quality of Service Results for Ireland

	Outbound Letters			*Inbound letters*		
	% delivered within 3 days		**Average delivery time**	**% delivered within 3 days**		**Average delivery time**
	2000	2001	2001	2000	2001	2001
Britain	93.8	92.8	2.2	94.0	91.3	2.3
Germany	94.6	91.9	2.3	92.8	90.9	2.4
France	92.3	91.0	2.4	89.8	90.6	2.3

10 REVIEW OF TELECOMMUNICATIONS TARIFFS

This section compares movements in incumbents' tariffs for a range of telecommunication services since the ODTR's last review in March 2002. It should be noted that competing operators sometimes offer cheaper tariffs and this would also be true in the other countries surveyed. The tariff comparisons, generated from the pricing of a number of baskets of telecom services, rank Ireland's position against a group of key countries in relation to telecom tariffs[43]. The tariff comparison also reflects only one tariff option per incumbent operator and by definition is not indicative of tariff levels available in other tariff options, which may be offered by operators.

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:

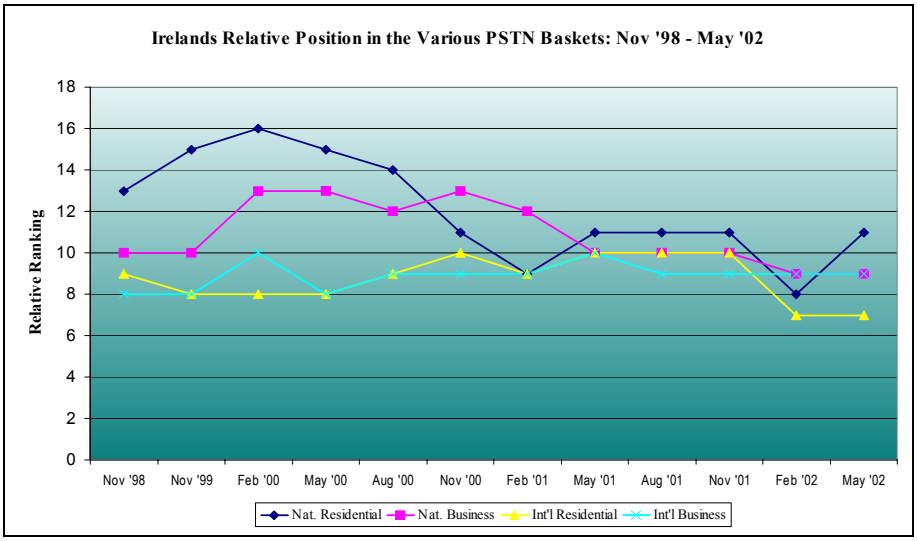
- National PSTN
- International PSTN
- National Leased Lines
- International Leased Lines
- Personal Mobile Basket
- Business Mobile Basket
- Personal Pre-paid Mobile Basket

10.1 OVERVIEW

Overall Ireland's position in the various PSTN baskets remained relatively stable during the quarter. In three of the baskets Ireland's position remained the same, while in the national residential basket Ireland's position decreased by three places. The key change was the increase in *eircom's* line rental charge in April 2002.

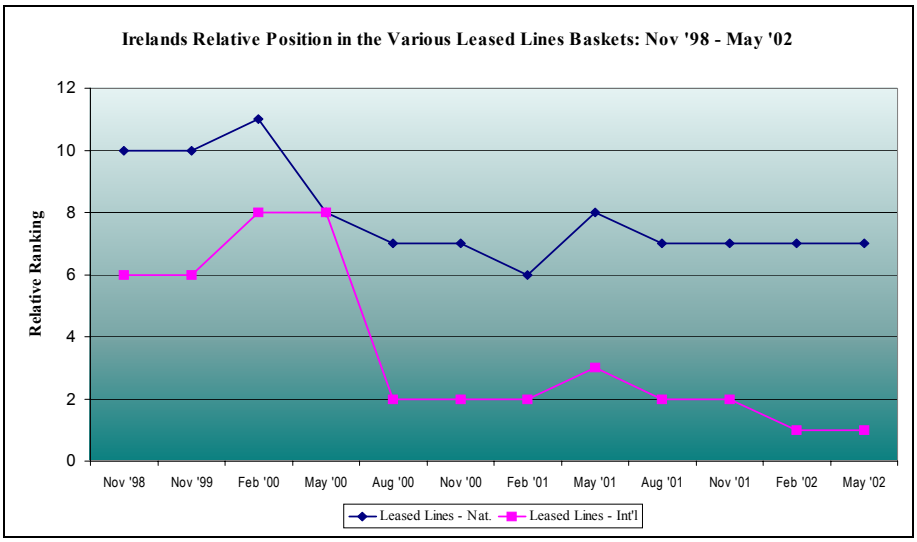
[43] For the purpose of our analysis only the EU 15, Iceland, Norway and Switzerland are examined.

Figure 10.1: Ireland's Relative Position for Various PSTN baskets: Nov '98 – May '02



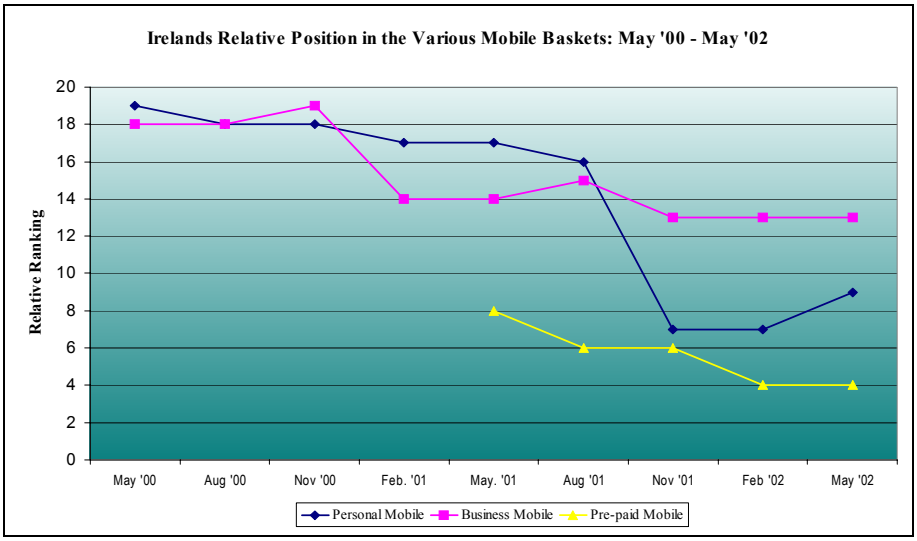
Ireland remained in 7th and 1st place respectively in the national and international leased line baskets.

Figure 10.2 Irelands Relative Position in the Leased Line Baskets: Nov '98 – May '02



During the quarter Ireland's position in the personal mobile basket disimproved by two places. Ireland's position in the business mobile basket and the pre-paid mobile basket remained the same since our last review.

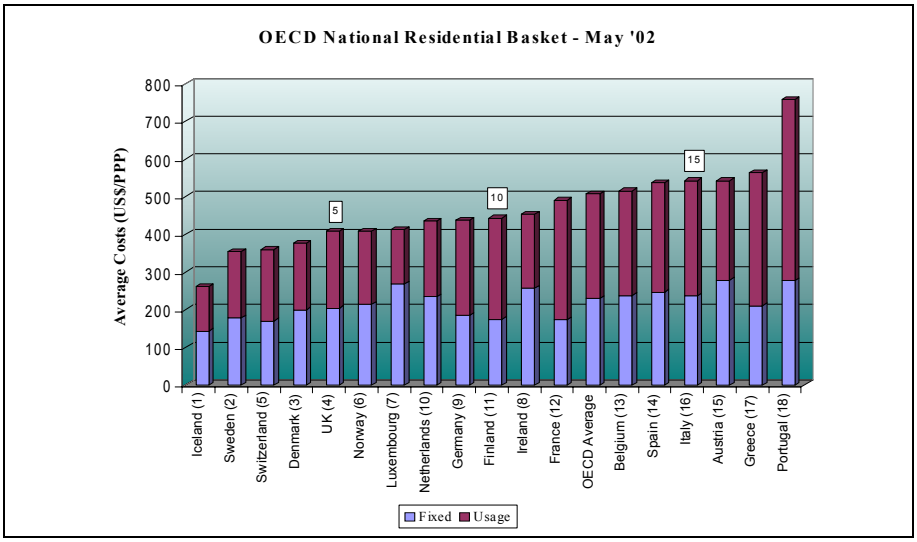
Figure 10.3: Ireland's Relative Position for various Mobile Baskets: May '00 – May '02



10.2 NATIONAL RESIDENTIAL BASKET

The "National Residential Basket" examines the average cost of national (including local) calls for the residential sector. Ireland's position in this basket has decreased by three places since our last review. In 11th place, Ireland lies two places ahead of the OECD average.

Figure 10.4: OECD National Residential Basket – May 2002

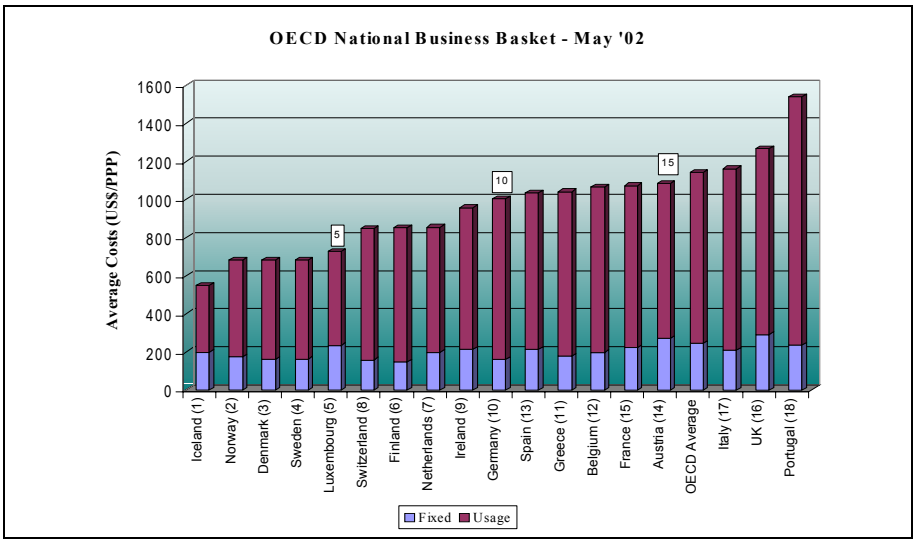


NB: The numbers in brackets represent the countries respective rankings as at March 2002.

10.3 NATIONAL BUSINESS BASKET

The "National Business Basket" examines the average cost of national (incl. local) calls for the business sector. This 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. In 9th place, Ireland's position has remained the same since our last review in March. Over the year Ireland's position has improved by one place and it now lies seven positions ahead of the OECD average.

Figure 10.5: OECD National Business Basket – May 2002

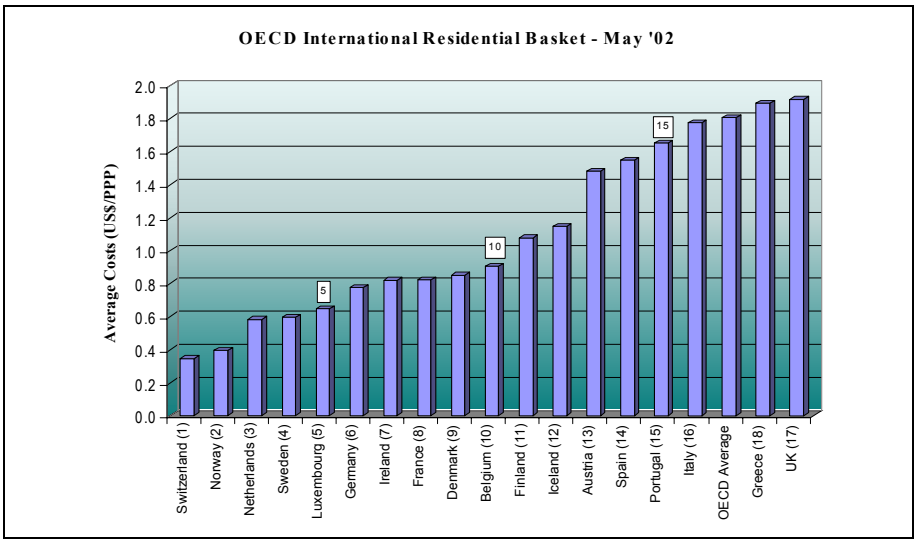


NB: The numbers in brackets represent the countries respective rankings as at March 2002

10.4 INTERNATIONAL RESIDENTIAL BASKET

The "International Residential Basket" sets out the average cost of international calls for residential users. In a basket that remained static during the quarter Ireland remained in 7th position.

Figure 10.6 OECD International Residential Basket – May 2002

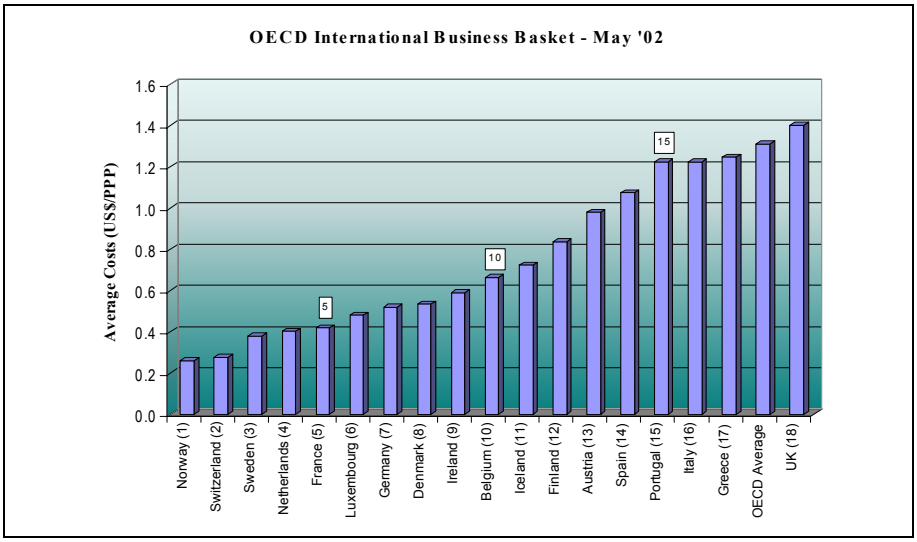


NB: The numbers in brackets represent the countries respective rankings as at March 2002

10.5 INTERNATIONAL BUSINESS BASKET

Figure 10.7 illustrates 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 25% to peak rates. Figure 10.7 illustrates Ireland's position in this basket. In 9th place, the same position since our last review, Ireland lies nine and ten positions ahead of the OECD average and the UK respectively.

Figure 10.7: OECD International Business Basket – May 2002

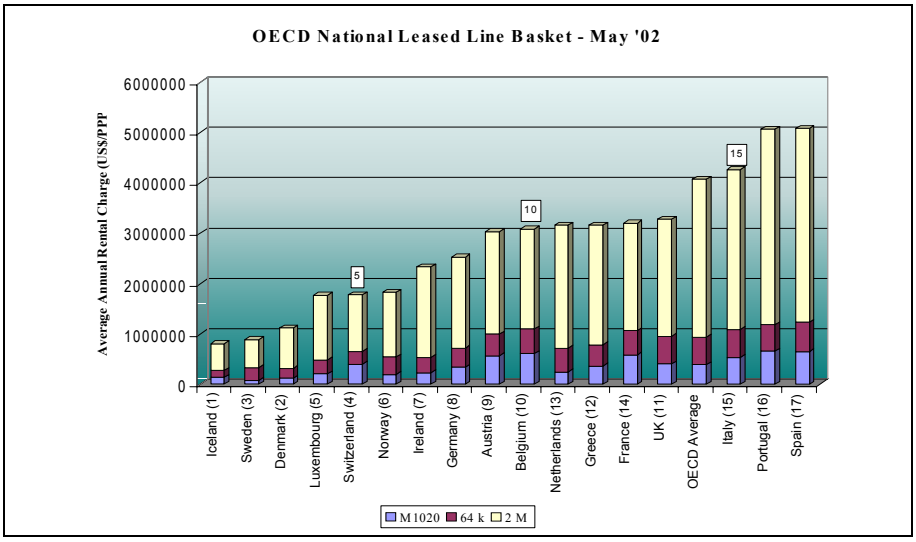


NB: The numbers in brackets represent the countries respective rankings as at March 2002

10.6 NATIONAL LEASED LINES

Figure 10.8 illustrates Ireland's position in the national leased line basket. Ireland has remained in 7th position for our last four reviews, and now lies eight positions ahead of the OECD average[44].

Figure 10.8 OECD National Leased Line Basket – May 2002



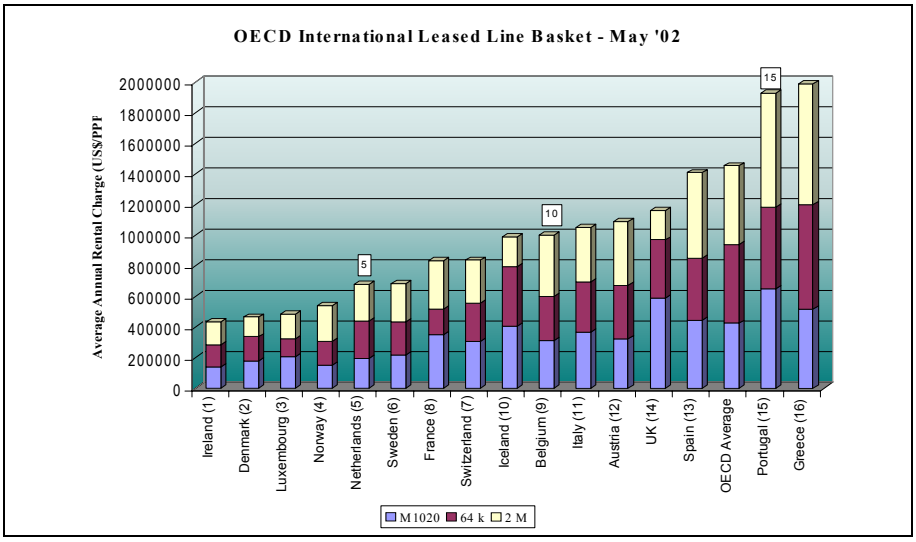
NB: The numbers in brackets represent the countries respective rankings as at March 2002

[44] The "National Leased Line Basket" is based on 100 circuits distributed over 6 distances from 2 to 500 km. Results exclude Vat.

10.7 INTERNATIONAL LEASED LINES

Ireland's position in the International leased line basket is illustrated in figure 10.9[45]. In 1st position Ireland lies twelve and fourteen positions ahead of the UK and the OECD average respectively.

Figure 10.9 OECD International Leased Line Basket – May 2002



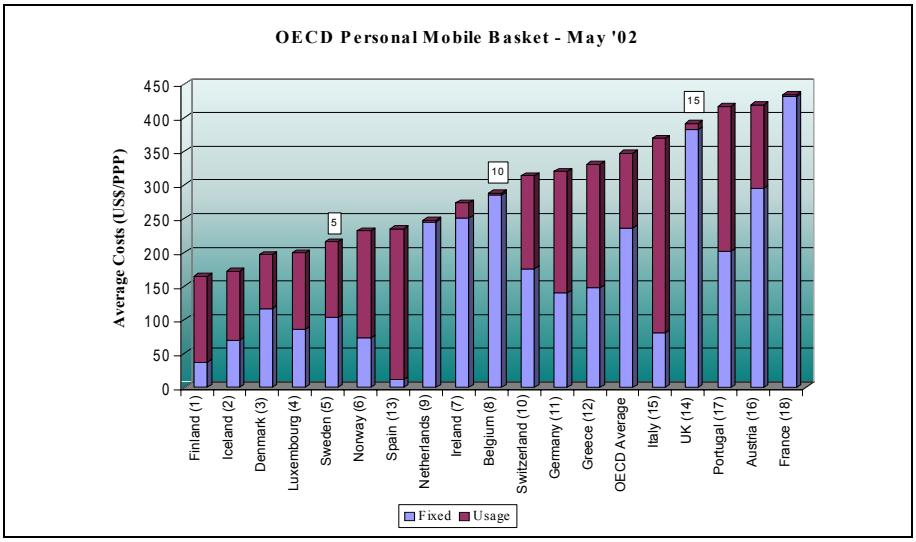
NB: The numbers in brackets represent the countries respective rankings as at March 2002

[45] The prices for these circuits are devised from the weighted average of half-circuits to all other OECD countries, using the traffic volume weighting method proposed by Teligen.

10.8 PERSONAL MOBILE BASKET - POST-PAID

This basket covers GSM tariffs[46] and reflects post-paid tariffs available from the incumbent mobile operator. The "Personal Mobile Basket" sets out the average of personal mobile tariffs. Ireland's position in this basket has decreased by two places, to 9th position, since our last review.

Figure 10.10: OECD Personal Mobile Basket – May 2002



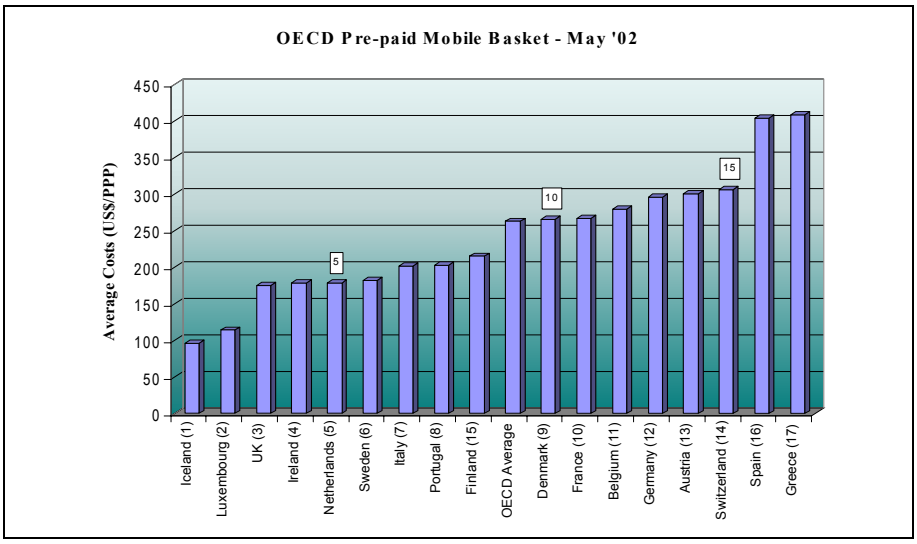
NB: The numbers in brackets represent the countries respective rankings as at March 2002

[46] The OECD Personal Mobile basket has national calls fixed at 200 distributed between local and national (not distance related) and including 10% of calls to other mobiles in the same network. Call duration will be 3 minutes for all types of calls. The charge for each call reflects the actual charge for the duration in question, as defined by the tariff. Call set-up and minimum charges are included. Detailed lists of caveats are set out in our quarterly review for March 2001.

10.9 PERSONAL PRE-PAID BASKET

This basket covers GSM or DCS tariffs[47]. Both reflect pre-paid tariffs available from the incumbent mobile operators. In 4th position Ireland lies one position behind the UK and six positions ahead of the OECD average.

Figure 10.11: OECD Personal Pre-paid Basket – May 2002



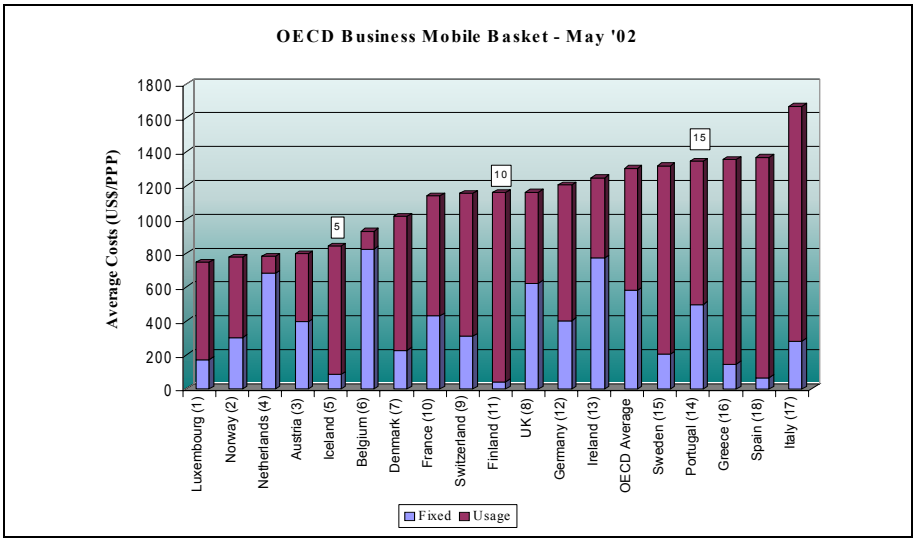
NB: The numbers in brackets represent the countries respective rankings as at March 2002

[47] The OECD Personal Pre-paid baskets have a peak / off-peak relationship of 25% / 75%, the same as the standard personal mobile basket and as the OECD stipulates. There are no handset charges or other initial fees included, and the cheapest option available is always used. As is the case with all the baskets US$/PPP is used.

10.10 BUSINESS MOBILE BASKET

This Basket covers GSM tariffs and reflects post-paid tariffs available from the incumbent mobile operator[48]. The "Business Mobile Basket" sets out the average cost of Business mobile tariffs. As illustrated in Figure 10.12 Ireland's position has not changed since our last review, remaining in 13th place.

Figure 10.12: OECD Business Mobile Basket – May 2002



NB: The numbers in brackets represent the countries respective rankings as at March 2002

[48] The number of national calls in the OECD Business Mobile basket is fixed at 1200. The national calls are just distributed between local and national (not distance related), and include 10% of calls to other mobiles in the same network. The international proportion of the basket follows the basic structure of the international PSTN basket, for business & residential usage. The only difference is that calls have duration of 3 mins.

11 APPENDIX 1 - LIST OF LICENSEES

GENERAL LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS	Responded To QR
AUCS Communications Services (Ireland) Ltd. - formerly known as AT&T Unisource	Y	N	Y	N	VPNs, International Call Centre Solutions.	Y
Aurora Telecom Ltd	Y	N	N	N	N	Y
Budget Telecommunications Ltd	Y	Y	Y	Y	Indirect Access (National/International/Mobile) Services. Number Translations Services.	Y
Cable & Wireless Services Ltd	Y	Y	Y	N	Customer Premises Equipment Frame Relay & ATM Freephone, Direct & Indirect Voice	Y
Cablelink (Acquired by ntl:)	Y	Y	Y	N	Cable TV services	Y
Carrier 1 AG	N	N	N	N	N	N
Chorus (trades as Irish Multichannel)	Y	Y	Y	N	Cable TV & Telephony services	Y
Cignal Global Telecommunications Ireland Ltd	N	N	N	N	N	N
Colt Telecom	Y	N	N	N	N	Y
Conduit Enterprises Ltd *(basic licence surrendered for general licence)*	Y	N	Y	N	Nat. & Int'l directory enquiry services	Y
BT (Concert) Global Networks Ltd.	N	N	N	N	N	Y
eircom	Y	Y	Y	N	Global voice, data and internet services provider.	Y
Vodafone Ltd.	Y	Y	Y	N	Mobile Operator	Y
Esat Telecommunications Ltd	Y	Y	Y	N	Global voice, data and internet services provider	Y
O2 Communications Ltd.	Y	Y	Y	N	Mobile Operator	Y
Esat Net	Y	N	Y	N	Internet Service Provider	Y
Formus	N	N	N	N	N	N
Global Crossing Ireland Ltd.	Y	Y	N	N	ATM; Frame Relay; IP VPN; IPLs	N

GENERAL LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS	Responded To QR
GTS Business Services (Ireland) Ltd (t/a Ventelo)	Y	Y	Y	Y	Carrier and access services; Internet services; callcards	Y
IDT Europe BV Lts Liability Coolder	N	N	N	N	N	N
Interoute Ireland Ltd	N	N	N	N	Residential & Business CPS Carrier Access. Prepaid Accounts and cards.	N
ITG Group (IRL) Ltd.	Y	N	Y	N	EPOS Equipment Payphones CPS on Voice Land-Line Traffic	Y
IXC Communications Services Europe Ltd.	N	N	N	N	N	N
LCN-Ireland, L.L.C.	N	N	N	N	N	N
LDMI Telecommunications of Ireland (previously known as Vianvi Ltd)	N	N	N	N	N	Y
Mastercall International Ltd	N	N	N	N	N	N
WorldCom	Y	Y	Y	N	Int'l frame relay, int'l freefone service into Ireland, Nat. & Int'l VPNs.	Y
Meridian Communications Ltd. (formerly known as ACCess Telecom)	N	N	N	N	Resale of mobile telephony services	N
NTL (UK) Group, Inc.	Y	N	Y	N	Leased Lines & Broadcasting Transmission Services	Y
Ocean Communications Ltd	Y	Y	Y	N	Complete voice, data and internet Service provider.	Y
PrimeTEC UK Ltd	N	N	N	N	N	N
Primus Telecommunications Ltd	N	N	N	N	N	N
RSL Communications (Ireland) Ltd	N	N	N	N	N	N
Sigma	N	N	N	N	N	Y
S.M. Communications (T/A Worldlink)	Y	Y	N	Y	Prepaid Services	Y
Smart Telecom	Y	N	N	N	N	Y
Startec Global Communications UK Ltd.	N	N	N	N	N	N
Stentor Communications Ltd (t/a Nevada tele.com)	Y	Y	Y	Y	Call centre and VPN solutions Callcards	Y

GENERAL LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS	Responded To QR
Swiftcall Centre	Y	Y	N	Y	Indirect Access & CPS Telephony Internet & Callcard Services Call Centre Services	Y
Tele2 Telecommunications Services Ltd.	N	N	N	N	N	Y
Teleglobe Ireland Ltd	N	N	N	N	N	N
Transaction Network Services Limited	Y	N	N	N	Dial-up access for point of sales.	Y
VarTec Telecom (UK) Ltd.	N	N	N	N	N	Y
Viatel (I) Ltd.	N	N	N	N	N	N
WTI Ireland Ltd.	N	N	N	N	N	N
Yac.com Ltd.	N	N	N	N	N	Y

BASIC LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS	Responded To QR
Alord Holdings Ltd (T/a Switchcom)	Y	Y	N	Y	Pre-paid/Post paid residential service.	Y
AT&T Global Network Services Ireland Ltd.	Y	N	Y	N	Dial up and leased line services	Y
Axis Communications *(formerly known as QoS Networks Ltd.)*	N	N	N	N	N	N
Beam	N	N	N	N	Wireless LAN services	N
Broad Band Communications Ltd.	N	N	N	N	N	Y
Broighter Networks Ltd.	N	N	N	N	N	Y
Cargo Community Systems Ltd.	Y	N	Y	N	e-commerce solutions	Y
Casey CableVision Ltd.	Y	N	Y	N	Cable TV Limited internet services	N
Crossan Cable	N	N	N	N	N	N
EGN B.V.	Y	N	Y	N	relay services for multinationals	Y
ESB Telecoms Ltd.	N	N	N	N	N	N
European Access Providers Ltd. *(formerly known as Hyper Lan Ltd.)*	N	N	N	N	N	N
Flag Telecom	N	N	N	N	N	Y
Genesis Internet Service Provider Ltd.	N	N	N	N	N	N
Genuity International Inc. (formerly known as GTE Internetworking International Corporation)	N	N	N	N	N	Y
Global Crossing Ireland Ltd. *(licence surrendered to the ODTR as of 07/08/01)*	N	N	N	N	N	N
Global One Communications Ltd.	Y	N	Y	N	ATM Switching	N
GTS Network (Ireland) Limited	N	N	N	N	N	N
Hibercall Ltd.	Y	Y	N	Y	Prepaid & Postpaid Services, Callcards	Y
IDirect	N	N	N	N	N	N
Indigo	Y	N	Y	N	Internet Service Provider	Y

BASIC LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS	Responded To QR
IXNET UK Ltd.	Y	N	Y	N	Limited service to banks.	N
Kokomo	N	N	N	N	N	N
KPNQwest Carrier Services B.V	Y	Y	N	N	IP VPN ATM Direct Internet Access	Y
Lake Communications System	Y	N	Y	N	ISDN, business solutions	N
MediaNet Ireland Ltd	Y	N	Y	N	Internet business solutions	N
Metromedia Fibre Network Ireland Ltd	N	N	N	N	N	N
Next Telecom	N	N	N	N	N	N
National Toll Roads (NTR)	N	N	N	N	Wireless LAN services	N
Radianz Connect Services (previously known as Reuters Connect Services)	Y	N	Y	N	Private wire services.	N
Rillbank Limited	Y	N	N	N	N	Y
Savvis Europe B.V.	Y	N	N	N	N	Y
SkyNet	N	N	N	N	Wireless LAN services	
Sonic Telecom	N	N	N	N	N	N
Société Internationale de Télécommunications Aéronautiques	Y	N	Y	N	Managed data network access services for the airline industry	N
Sprintlink	N	N	N	N	N	N
TCS (Ireland) Ltd.	Y	Y	N	N	Voice Telephony services via the Internet.	N
Tele Media International Ltd.	N	N	N	N	N	N
Timas Ltd (T/A Galileo Ireland)	Y	N	Y	N	Frame relay service for travel agents	Y
Torc Telecom	N	N	N	N	N	N
Universal Access Ireland Ltd	N	N	N	N	N	N
Valuetel Ltd.	Y	Y	N	Y	Re-selling long distance domestic & international services; callcards	N
Waterland Technologies	N	N	N	N	N	N
Web-Sat Ltd.	N	N	Y	N	Internet access via satellite; SMG news services.	Y

12 APPENDIX 2 - DOCUMENTS ISSUED, MARCH 2002- JUNE 2002

DOCUMENT NO.	NAME
FIXED	
02/25	Network Resilience – Response to Consultation
02/27	*eircom*'s Reference Interconnect Offer – Consultation Paper
02/28	Service Levels provided to Other Licensed Operators by Operators with Significant Market Power – Decision Notice D2/02
02/30	*eircom*'s Reference Interconnection Offer – Miscellaneous Issues: Response to Consultation Paper Decision Notice and Further Consultation
02/36	Local Loop Unbundling Review of *eircom*'s Access Reference Offer: Decision Notice D4/02
02/37	*eircom*'s Wholesale Bitstream Reference Offer
02/38	Interconnection Rates in the Irish Telecommunications Sector
02/39	Interconnection Rates in the Irish Telecommunications Sector – Decision Notice D5/02 on Rates to apply from 1 December 1999 – 31 March 2000
02/40	Interconnection Rates in the Irish Telecommunications Sector – Decision Notice D6/02 on rates to apply from 1 April 2000 to 31 March 2001 – Decision Notice
02/41	CPS Call Quality Summary Report
02/42	Price Cap on *eircom* 2001 Compliance Statement in accordance with the Telecommunications Tariff Regulation (Modification) Order, 1999 (Statutory Instrument No. 438 of 1999)
02/44	Dispute Resolution Determination No. 02/02: Summary
02/46	Dispute Resolution Determination No. 03/02: Summary
02/47	Carrier Pre-Selection in Ireland
MOBILE	
02/33	Consumer Awareness of Mobile Roaming – A report by the ODTR, part of a joint ODTR/Oftel study on mobile roaming
02/34	Benchmarking study and Consumer Advice on mobile roaming between Ireland and the UK – A report by the ODTR, part of a joint ODTR/Oftel study on mobile roaming
POST	
02/32	Application by An Post to increase the price of reserved Postal Services – Response to Consultation

DOCUMENT NO.	NAME
RADIO SPECTRUM/ TECHNOLOGY	
02/29	Optical Access – Briefing Note
02/43	Strategic Management of the Radio Spectrum in Ireland
02/45	Potential Applications for Next Generation Networks – Briefing Note
02/49	Expanding Opportunities in the Radiocommunications Market: Fixed Wireless Access (FWA)
BROADCASTING	
02/48	Response to request for comments from the Forum on Broadcasting - 2002
GENERAL	
02/26	The Irish Communications Market Quarterly Review – March 2002
02/31	Address by Etain Doyle to the Irish Congress of Trade Unions Conference 26 March 2002 – Can Effective Regulation Deliver Quality Public Services
02/35	Address by Etain Doyle to Waterford Institute of Technology 10th April 2002 – Telecommunications Regulation – "where it has been, where it is going"