

The Irish Communications Market Quarterly Review

March 2001

Document No. ODTR 01/14 **8th March 2001**

Oifig an Stiúrthóra Rialála Teileachumarsáide
Office of the Director of Telecommunications Regulation
Abbey Court, Irish Life Centre, Lower Abbey Street, Dublin 1
Telephone +353-1-804 9600 Fax +353-1-804 9680 Web:www.odtr.ie

CONTENTS

1	FOREWORD BY THE DIRECTOR	3
2	MARKET DEVELOPMENTS	4
	2.1 Overview	4
	2.2 Consumer Survey	5
3	FIXED LINE MARKET	8
	3.1 TELECOM ACCESS PATHS	8
	3.2 RETAIL TRAFFIC	9
	3.3 RESIDENTIAL SERVICES	.10
	3.4 Infrastructure	.11
	3.5 REGULATORY DEVELOPMENTS	.11
4	MOBILE COMMUNICATIONS	.13
	4.1 Data Services	.14
	4.2 REGULATORY DEVELOPMENTS	.15
	4.3 COMPETITION	.16
5	INTERNET & MULTIMEDIA	.19
	5.1 REGULATORY DEVELOPMENTS	
6	CABLE & MMDS	.22
	6.1 IRELAND VS EUROPE	
	6.2 REGULATORY DEVELOPMENTS	
7	RADIO SPECTRUM	.25
8	POSTAL REGULATION	.26
Ū	8.1 EU Postal Directive	
	8.2 IRISH IMPLICATIONS	
9	REVIEW OF TELECOMMUNICATIONS TARIFFS	28
	9.1 Overview	
	9.2 National Residential Basket	
	9.3 NATIONAL BUSINESS BASKET	
	9.4 International Residential Basket	
	9.5 International Business Basket	.32
	9.6 NATIONAL LEASED LINES	.32
	9.7 International Leased Lines	.33
	9.8 Mobile Tariffs	.34
	9.9 PERSONAL MOBILE BASKET – POST-PAID.	.35
	9.10 Personal Pre-paid Basket	
	9.11 BUSINESS MOBILE BASKET	.36
10	APPENDIX I – LIST OF LICENSEES	.38

LEGAL DISCLAIMER

The information and statistics contained within this document are derived from a variety of sources. While all reasonable care has been taken in preparing it, no responsibility whatsoever is accepted by the Director of Telecommunications, her lawful servants or agents for any loss or damage, howsoever caused, through any reliance whatsoever placed upon any statement or any calculation howsoever made in this document.



1 FOREWORD BY THE DIRECTOR

This review summarises the developments in the Irish communications sector in the period since our last review on the 1st December 2000. We would like to thank all those operators and organisations who have contributed information and comments for this review and we appreciate their efforts in facilitating the publication of this document. We 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. We are pleased to see previous quarterly reports are some of the most accessed reports on our website (www.odtr.ie) and reflect the growing importance attached to this review.

Since our last quarterly report my office has published 19 papers including consultations on national numbering and mobile numbering; spectrum management and internet access codes. We have issued a number of papers on local loop unbundling and an information notice on regulation of postal services. We also issued our response to the consultation on extending choice and opening up the market for 3rd generation mobile services.

We are pleased to include in this quarterly report the results of a survey conducted by Irish Marketing Surveys into attitudes to Telecommunications services in the residential sector. As with our SME survey published with our last quarterly report, we see an increasingly competitive telecommunications environment and a consumer base very aware of their options in attaining the best price and quality from their telecommunications provider. The results of the survey are referred to throughout the report. The survey report is published separately.

Etain Doyle

Director of Telecommunications Regulation

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.

2 MARKET DEVELOPMENTS

Since our last review in December 2000, the Irish telecommunications sector has continued to experience expansion, with almost all segments of the market experiencing increased demand. The data in the review is based on returns from licencees for the period 1st October to the 31st December 2000.

The total number of employees in the telecoms sector is 17,450;



2.1 OVERVIEW

Key market indicators include:

- Total revenues for fixed, mobile and broadcasting markets have increased from just over IR£2 billion to IR£2.26 billion a year;
- ☐ The telecoms sector was previously estimated to account for approximately 2.5% of Irish GDP¹, this figure has increased to 2.79%.
- The new entrants share of the fixed line market has increased from 17% to over 19%;
- As at the end of December 2000 there are now over 150,000 business and residential subscriber lines using CPS;
- ☐ In the period up to the end of February 2001 one additional basic licence was awarded, bringing the total number of Basic licences to 32. The number of General licences remains the same at 46.
- To date, 25 of the 46 General licences and 21 of 32 basic licences have commenced operations in the Irish market;
- ☐ The Irish mobile penetration rate has risen to 67% as at 1st February 2001;
- There are approximately 630,000 cable/MMDS subscribers in Ireland, while approximately 1 million households were passed.

¹ Figure was calculated using GDP at market price (2000) – ESRI Quarterly Economic Commentary, December 2000. The previous quarter's figure was calculated using GDP at market price (1999). Using the 2000 GDP figure, the previous quarter's GDP calculation would have been 2.5%.

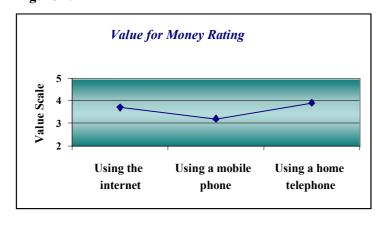
2.2 CONSUMER SURVEY

The ODTR commissioned Irish Marketing Surveys² to conduct a survey of residential telecommunications users on their attitudes to various telecommunication service providers. The findings of the survey are from a representative sample of 500 respondents, with a confidence interval of 95% (i.e. findings may range 5% either side of those noted). The survey is quoted throughout the quarterly review and is published separately³. The ODTR plans to publish data from the Measuring Licence Operator Performance program in the near future.

The findings show strong activity in all sectors in the Irish telecommunications market. There is an awareness of the opportunities to cut telephone costs through shopping around. When asked questions related to their general attitude to telecommunications the respondents to the survey agreed or agreed strongly with the following statements:

- ☐ I believe there are savings to be made by changing my home telephone supplier (45%)
- The overall costs of my home telephone has reduced in the past 12 months (53%)
- ☐ I am more satisfied with my telecommunications supplier than 12 months ago (51%)
- ☐ I believe the telecommunications market is more competitive than 12 months ago (83%)

Figure 2.1



The survey asked respondents to rate various telecommunications services on a scale. The chart opposite illustrates the value for money rating, where five represents excellent value for money and one is poor value for money.

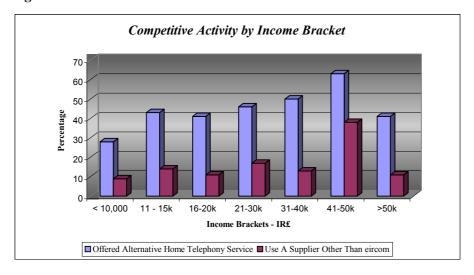
Compared to the SME sector there is a lower awareness of CPS in the residential market (37%). Overall two out of five of survey respondents said they had been approached by a company other then *eircom* to offer telephony services. There is an income divide behind this statistic, 28% of those earning less than IR£10,000 had been offered an alternative telephony

² The survey questioned 500 individuals and was conducted in February 2001.

³ Care should be exercised when interpreting data where the sample size is less than 500 as the sample may not be fully representative.

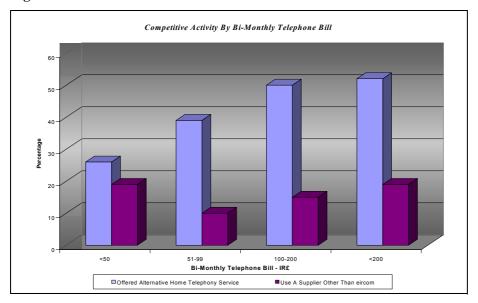
provider whereas 63% of those earning IR£41,000 – IR£50,000 had been offered an alternative operator. This split also translates to telephone spend. Only 26% of those whose bills were less than IR£50 were offered an alternative carrier, whereas over 50% of those with bills in excess of IR£100 were approached.

Figure 2.2



Of the population surveyed, 14% had switched to a supplier other than *eircom* for some or all of their telephony needs. The breakdown of this 14% by income patterns shows that it is the higher income earners, those earning IR£41,000 to IR£50,000 where the adoption of a new carrier has been highest at 38%. The relative split when you consider telephone spend it is not so clear cut. Of the 50% who spent more than IR£100 on their telephone costs and were offered an alternative, 31% of the 50% actually took up the service, whereas of the 26% who spent less than IR£50, 74% of them took up an alternative carrier. The main reason cited for changing supplier, at 76%, was price. As a result of switching carrier, 81% say that their home telephone costs have reduced.

Figure 2.3



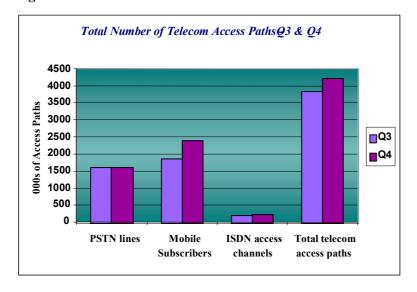
3 FIXED LINE MARKET

During the quarter ended December 2000 the fixed line market continued to experience growth, with total revenue and traffic increasing during the period. Total fixed line revenue for the quarter now stands at over £372 million⁴, approximately 66% of total telecommunications revenue. The new entrants share of the fixed line market has risen to approximately 19%, an increase of 2% from September 2000.⁵

The ODTR estimates that as at the end of December 2000 there were over 150,000⁶ business & residential subscriber lines using CPS⁷. This figure has increased by 30,000 since the previous quarter.⁸

3.1 TELECOM ACCESS PATHS

Figure 3.1



number The total of telecom access paths has increased during the 3.851 quarter from million to 4.221 million an increase of almost 10%. The increase is mainly attributable to the increase in mobile subscribers.

3.1.1 PSTN Lines

The total number of PSTN lines has remained relatively constant at just over 1.59 million lines at the end of December 2000. This figure is split by residential and business lines, with 1.09 million and 0.5 million lines respectively.

⁴ This figure includes revenue from retail traffic (local, national, international, to mobiles, internet, payphone and other), internet services, leased lines, switched data services and other services such as directory publications and maintenance of customer equipment. Data based on operator returns.

⁵ Based on revenue figures supplied by operators as at the end of December 2000.

⁶This figure represents the number of subscribers measured in Caller Line Identification (CLIs)

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.

3.1.2 ISDN Access Channels

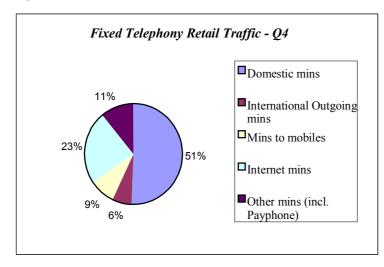
The number of ISDN access channels has increased since September 2000 from approximately 204,000 to approximately 218,000 access channels as at the end of December 2000, which represents an increase of approximately 7%. The figure for total ISDN access channels includes basic rate, fractional rate and primary rate ISDN.

3.1.3 Mobile Subscribers

The number of mobile subscribers increased significantly during the quarter to the end of December 2000 to 2.398 million⁹. This represents an increase of 16.4% from the previous quarter. Mobile lines continue to exceed fixed lines as the preferred means of telecommunications, accounting for nearly 57% of the total access paths.

3.2 RETAIL TRAFFIC

Figure 3.2



Retail Fixed Telephony traffic measured in minutes has increased during the period by around 3%. Domestic minutes, internet minutes and other minutes¹⁰ have all increased during the period while minutes to mobiles have remained almost static and international minutes have

slightly decreased. Although the category 'other minutes' has increased as a whole payphone minutes have decreased significantly during the quarter.

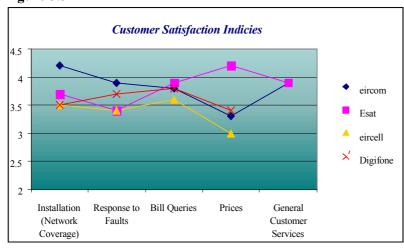
⁸ Source: Document No. ODTR 00/91.

⁹ Source: FT Mobile Communications, February 2001.

¹⁰ Other minutes includes services such as premium rate services, voicemail, operator services, freefone, LoCall and Callsave calls and Payphone minutes.

3.3 RESIDENTIAL SERVICES

Figure 3.3



The consumer survey commissioned by the ODTR included an indication of perceived satisfaction levels for various services provided by their carrier. Overall satisfaction levels in the fixed line market

are as above. The chart illustrates the average level of satisfaction for five main categories: Installation (or Network Coverage in the case of Mobile providers), response to faults, bill queries, prices and general customer services. The respondents rated their level of satisfaction on a scale of one to five, five being very satisfied and one being very dissatisfied. The graph above indicates that respondents are more satisfied with fixed line operators in most categories. Respondents were significantly more satisfied with Esat's fixed line pricing than with *eircom*. Mobile pricing scored low on the satisfaction scale, with Eircell just behind Digifone. The level of satisfaction regarding general customer service was even for both operators.

Table 3.1 summarises the carriers operating in the residential market offering fixed services.

Table 3.1: Fixed Services offered in the residential markets

Operator	International	Long Distance	Local
Chorus	~	~	~
eircom	~	~	~
Esat Telecom	~	~	V
Hibercall	~	✓	~
Interoute	~	~	'
ntl	~	✓	✓
SM Communications	~	~	X
Swiftcall	~	✓	✓
Switchcom	~	~	✓
Torc Telecom	~	X	X
Valuetel	~	~	×

Source: ODTR March 2001

3.4 INFRASTRUCTURE

The provision of, and access to, sufficient broadband infrastructure is critically important to the growth of the telecommunications sector. The Government is committed to the development of widely accessible, low cost infrastructure. The National Development Plan (NDP) 2000-2006 has initially selected 13 projects to promote investment in broadband infrastructure to less developed regions targeting the BMW and South and East. The NDP has provided funding of €75 million for this project, which involves seven companies. The funding is expected to secure a further spend of €175 million from the private sector. The funding is the first allocation out of a total of €200 million set aside under the NDP for e-commerce and communications infrastructure and services.

The Telecommunications and Internet Federation (TIF) published a report in February 2001¹¹ outlining the need for the establishment of a Code of Best Practice to govern various issues related to the rollout of telecommunications infrastructure. Some of the guidelines suggested for inclusion in the Code are those concerning technical specifications, notification procedures, legal responsibilities, trench sharing issues, treatment of land types (roads, paths, fields etc), timely processing of applications by local authorities and a documented dispute resolution process.

3.5 REGULATORY DEVELOPMENTS

3.5.1 Local Loop Unbundling

The EU Regulation on Unbundled Access to local loops and related facilities required that *eircom* publish a Reference Offer for access to local loops and related facilities by end December 2000 and meet reasonable requests from that date. Because of the short time afforded to the Director to scrutinise the Reference Offer the Director issued Information Notice 00/99 setting out the next steps required in order to implement LLU in Ireland.

Information Notice 01/01 set out the Director's views on three issues which were of immediate concern to her. The information notice reduced restrictions on the definition of exchange space available for collocation, removed the restrictions on collocation of ADSL only equipment in such space, and allowed sharing of collocation space between operators. *eircom* published Version 1.2 of the Reference Offer in early February 2001 to take account of these changes and also to include industry agreed product descriptions. The industry working groups are currently detailing requirements for sub-loop unbundling, and are developing detailed processes to support the Reference Access Offer.

A separate workstream is involved in understanding eircom's cost justification as provided to the ODTR. Information notice 00/99 stated that these seemed high, and a further announcement on pricing will be made shortly.

Work on another form of LLU-bitstream LLU, mandated by D6/00 -is progressing well and the Director welcomes the commencement of interoperability end user trials with Other Licensed Operators in advance of commercial launch.

The ODTR also, under 00/98, announced that it is conducting a detailed review of ADSL¹² technology with regard to the delivery of Licensed Programme Services.

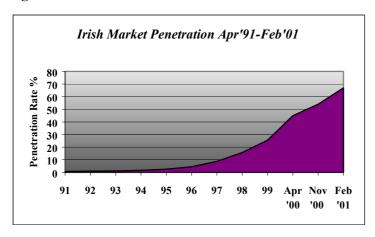
Telecommunications in 2001 – A New Urgency, IBEC February 2001.
 ADSL is one type of DSL technology, it is asymmetric, which means that large quantities of data can be transmitted in one direction and a small quantity of data and telephone calls in the other direction.

4 MOBILE COMMUNICATIONS

Since our last review in December 2000 there has been a considerable increase in the mobile penetration rate, with some 400,000 mobile phones purchased in Ireland in the run-up to Christmas. The mobile penetration rate is a measure of the percentage of the population who have a mobile phone. The Irish mobile penetration rate has maintained its upward trend, rising from 54% at the start of November 2000 to 67% at the start of February 2001. Also, according to the ODTR/IMS residential survey, 72% of respondents had the use of a mobile phone.



Figure 4.1: Irish Market Penetration



Source: FT Mobile Communications and ODTR estimates

Figure 4.2 (overleaf) illustrates the various European penetration rates. Norway has the highest penetration rate of nearly 84%. It can be seen from the graph that only a few percentage points separate the countries situated around the average. A rise of 3% in the Irish penetration rate would put Ireland ahead of Luxembourg and into the top half of the table.

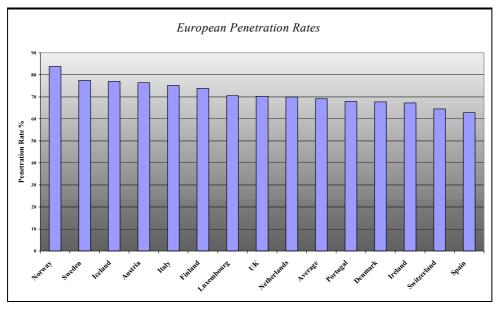


Figure 4.2: European Penetration Rates

Source: FT Mobile Communications January 2001.

4.1 DATA SERVICES

One of the success stories of the mobile market has been the rapid take up of SMS (short messaging services). The popularity of SMS messaging especially amongst the youth market has helped the growth of penetration rates in the mobile market.



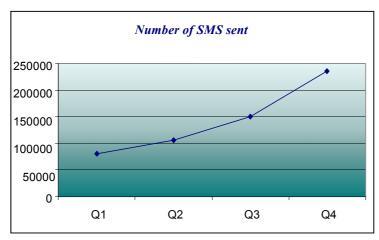


Figure 4.3 illustrates the number of SMS sent during the last four quarters in the Irish market.

Source: ODTR Quarterly Review Questionnaire

Figure 4.4 illustrates the individual contribution to operator's revenues from data services. The European countries with the highest penetration rates appear to be the countries who are gaining the most amount of revenue from data services.

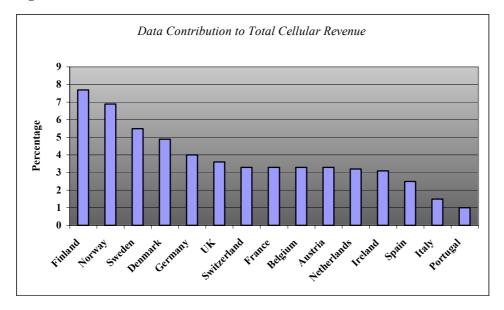


Figure 4.4: Data Contribution to Total Cellular Revenues

Source: Strategy Analytics, Mobile Communications Service – Europe, August 2000.

Irish mobile operators have been particularly innovative in promoting data use – via SMS or WAP phones. Both operators have portals where users can select various items of news/infotainment direct to their mobile phones.

4.2 REGULATORY DEVELOPMENTS

4.2.1 3G

In December 2000 the Director announced the approach to be followed in the forthcoming competition for 3G licences in Ireland. The Director concluded that her objective was to encourage market entry at both the service and infrastructure levels and this would be best served by offering two distinct 3G licence packages, one of which carries incentives to support certain types of MVNOs¹³. She therefore decided to offer one "class A" licence and three "class B" licences, all of which will comprise a minimum of 2 x 15 MHz paired and 5 MHz unpaired 3G mobile spectrum.

4.2.2 Numbering

The numbering resources currently allocated to mobile services in Ireland are rapidly reaching exhaustion. Mobile number portability had been raised in the context of number exhaustion relief in the consultation on the expansion of mobile numbering capacity

¹³ For further information refer to ODTR Document No 00/92.

published by the ODTR in November 2000¹⁴. It is also relevant in the context of third Generation mobile services and was raised in the consultation on opening the market for 3G mobile services¹⁵ in July 2000.

The Director published her views on the consultation in a decision notice in January 2001. Given the Directors duty to ensure an adequate supply of mobile numbers at all times, and the preferred choices of the consultation, she decided to implement Full Mobile Number Portability (FMNP), whilst opening up the 0 and 1 number ranges as an interim solution. The Directors decision and the views of the five respondents to the consultation are available on the ODTR's website (Decision Notice D1/01).

4.2.3 Mobile Transit

A decision notice regarding *eircom*'s introduction of a transit charge for freefone traffic from mobile networks to OLO networks was issued in March 2001¹⁶. This Decision Notice concerns the introduction by *eircom* of new charging arrangements for the handling of calls to freefone numbers where:

- these calls are originated from a mobile handset, and
- terminate on a freefone number operated by a licensed operator other than *eircom*.

4.3 COMPETITION

Meteor launched its service on the 22nd of February 2001, and announced the same rate for peak and off-peak and the convergence of pre-paid and post paid handset and call charges. Meteor announced that coverage at launch was in excess of 55% in terms of population, and includes the urban centres of Dublin, Cork, Limerick, Waterford and Galway and the main routes between these cities.

On the 21st of December 2000, the board of *eircom* announced that Vodafone is to offer to acquire *eircom's* mobile communications business, Eircell. The Eircell business would be demerged from *eircom* to form a new company called Eircell 2000 plc. Vodafone will offer to exchange .9478 Vodafone shares for every two Eircell 2000 shares. The demerger, however, is conditional upon shareholder approval at the Extraordinary General Meeting.

¹⁴ Expansion of Mobile Numbering Capacity, Consultation Paper, ODTR Document No. 00/20, March 2000 and Decision Notice D5/00, ODTR Document No. 00/28, April 2000.

¹⁵ Opening the Market for Third Generation Mobile Services (3G Mobile), Consultation Paper, ODTR Document No. 00/52, July 2000.

¹⁶ For further information refer to ODTR Document No 01/13.

During the quarter Digifone announced the abolition of credit expiry limits on the Speakeasy pre-pay mobile phone service. Previously all pre-paid mobile phone cards in Ireland were time limited, which means that all customers had time limits imposed on them by which credit applied to pre-pay accounts had to be used. To keep the service running, customers must make just one chargeable call every six months.

4.3.1 Consumer Survey

According to the ODTR/IMS residential survey of the 72% of respondents who had the use of a mobile phone, 58% said they were an Eircell subscriber with 40% Digifone subscribers. Of mobile users 65% use prepaid options, against 35% on a contract basis. There are interesting demographic trends which reinforce the view that the mobile sector is being driven by the youth sector. In the survey, 95% of 15-24 year olds had the use of a mobile phone; they also have the highest penetration of those using prepaid options at 79%.

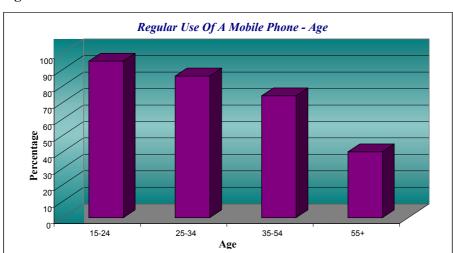
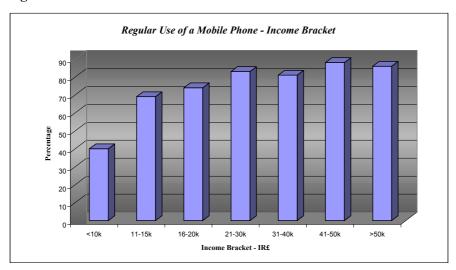


Figure 4.6

There is an income divide evident in mobile penetration however with those earning less than IR£10,000 having a penetration rate of 40% while those earning over IR£41,000 have 80% plus penetration rates. In terms of churning, 11% of our survey said that had switched mobile supplier in the past twelve months. Interestingly the highest churn rate was in the 15-24 age bracket where 20% had switched supplier. The most common reasons cited for moving were a better deal (24%) or a better phone (22%).

The survey went on to ask if mobile users were able to understand and compare pricing options from different mobile operators. When asked, 71% said they could differentiate between mobile operators tariff options. When asked if respondents had read the terms and conditions of their mobile agreement before purchasing only 31% said they had.

Figure 4.7

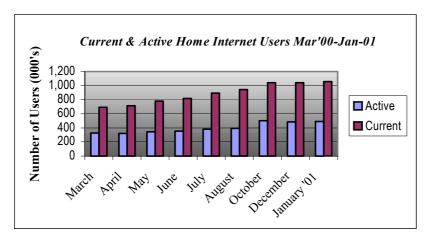


5 Internet & Multimedia

The last quarter of 2000 saw the Irish internet universe remain stable with just over a million people enjoying home internet access and with around 500,000 using it each month. At the end of January 2001 internet penetration was estimated at 27%. Also 16% of those currently offline say they plan to get connected at home within a year¹⁷.



Figure 5.1: Residential Internet Access and Usage in Ireland



Source: Nielsen NetRatings, January 2001¹⁸.

Ireland has the largest number of under 25's, as a proportion of its internet universe, in Europe (41%), and the lowest percentage of 25-49 year olds. These figures are significant as it confirms Irelands future internet growth potential. Of these people who do choose to use the internet at home, the amount of time that they spend online has increased since our last review in December 2000. According to Nielsen's internet figures the average Irish home user spent over 4 hours 25 minutes on line in January.

¹⁷ Source: Nielsen NetRatings, 31/01/2001

¹⁸ Notes: Current Internet Universe: All individuals 2+ who have access to the internet from home i.e. penetration. Active Internet Universe: All individuals 2+ who accessed the Internet from home i.e. usage

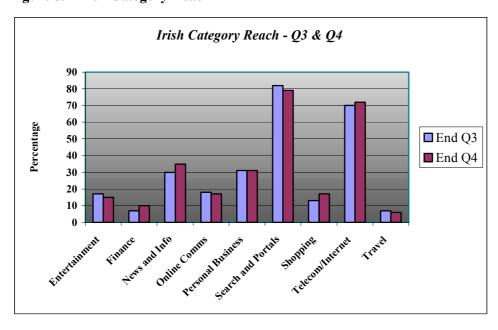
Table 5.1: Average Internet Usage for Ireland, the UK and the US, January 2001

	United States	Ireland	United
			Kingdom
Number of Sessions per Month	16	9	12
Number of Unique Sites Visited	9	18	18
Time Spent per Site	54:02	14:38	20:21
Time Spent per Month	8:13:41	4:25:35	5:59:38
Time Spent During Surfing Session	31:03	28:48	30:01
Duration of a Page viewed	00:58	00:47	00:46
Active Interent Universe	96,060,707	489,809	11,178,521
Current Internet Universe Estimate	162,463,507	1,056,656	21,220,773

Source: Nielsen NetRatings, January 2001

Search and Portal sites are clearly the most popular destinations for Irish internet users with a reach at the end of quarter four of 82% (See figure 5.2). Telecom portals have seen their popularity grow through the quarter with sites such as dol.ie and e-merge.ie attracting a lot of customers. These sites can also be accessed through WAP phones which give consumers without a PC an alternative means of accessing the internet.

Figure 5.2 Irish Category Reach



Source: Nielsen NetRatings, January 2001

From the responses in the ODTR/IMS survey, 37% of respondents had access to the Internet at home. This is significantly higher than the Nielsen data referred to earlier. Of these, 52%

logged on using free software provided by an ISP while only 28% accessed via a subscription based service. Of those connected at home, 36% said they had purchased online with the balance not purchasing online because of fears about internet security, credit card fraud and generally not interested in purchasing anything online.

Of those not connected at home the main obstacle cited from respondents to getting online was a lack of interest (38%). However it is interesting to note that in the youth age bracket of 15-24 only 20% were not interested in getting online. The main obstacle in this age group is not having access to a PC at home.

5.1 REGULATORY DEVELOPMENTS

In an effort to introduce greater choice on Internet Access, the Director paved the way for telecoms operators and ISP's to offer internet users a greater choice of pricing models (ODTR Doc. No. 01/12). Two new access codes and number ranges for internet access, 1892 Pay-As-You-Go and 1893 partial or full flat rate were introduced by the regulator following a public consultation. In introducing the new codes the regulator is developing the existing framework by opening new numbers that are dedicated to internet traffic.

6 CABLE & MMDS

As at the end of December 2000, the ODTR estimates that there were approximately 630,000 cable & MMDS subscribers in Ireland, an increase of 2% from June 2000. Approximately 980,000 households were passed. There are approximately 1,200 employees in the cable/MMDS sector. Total cable & MMDS revenues have increased by approximately 12% since the previous quarter. The increase in total revenues is mainly attributable to increases in Premium usage revenues.

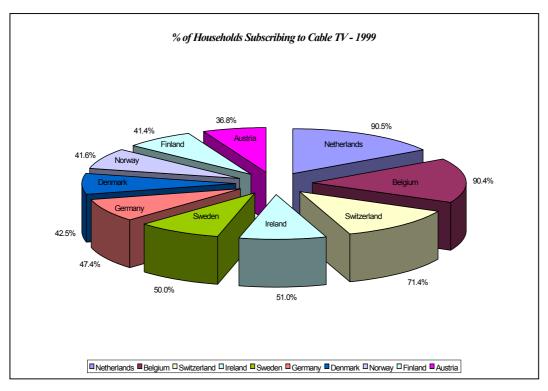


Last quarter both operators began supplying telephony services in the upgraded sections of their franchise areas and due to this the number of subscribers to telephony services has increased significantly, by approximately 120% since the previous quarter. The number of subscribers for internet access has also increased dramatically since the previous quarter, by approximately 460%. Internet services were also introduced last quarter. Both telephony and Internet subscriber figures are from a very low base. No digital interactive TV services such as home shopping, home banking, games, education and Video-on Demand have been offered to date by Irish based companies. There are issues regarding rollout and service in accordance with licence terms. The Director has reminded operators of their regulatory obligations and is currently dealing with the matter.

¹⁹ Source: Quarterly Review, September 2000. Document No. ODTR 00/71

6.1 IRELAND VS EUROPE

The chart below shows the 10 Western European countries with the highest percentages of households subscribing to cable TV. The Netherlands, Belgium and Switzerland have the highest rates. Ireland has the fourth highest at 51%. However, many European households do not have active cable TV connections; service adoption remained below 50% of households in 11 of the 16 major markets at the end of 1999. Italy had only 0.3% of households subscribing to cable TV while Greece had only 0.4%, followed by Spain with 4.1% in 1999²⁰. The introduction of cable modem services means that for the first time, cable operators can provide TV, Internet access, telephony and other datacomms via a single connection.



Source: Analysys; 2000 - New Entrants Market Trends

6.2 REGULATORY DEVELOPMENTS

6.2.1 Code of Practice

A consultation paper has been issued to review the codes of practice for the major Cable and MMDS operators for handling consumer complaints (Document No. ODTR 00/95). By the

_

²⁰ Source: New Entrants Market Trends (www.newentrants.com).

end of 2000, approximately 300 complaints were directed to the ODTR by customers who failed to get a satisfactory response from service providers. Most complaints were in relation to the quality of service, including issues of installation of service followed by queries or complaints in relation to billing and complaints about customer service. While competition is developing in this market, specific regulatory measures are needed to support high quality service²¹.

6.2.2 Broadcasting Bill

The Broadcasting Bill was passed by the Dail in December 2000 and by the Seanad on the 22nd February 2001. The ODTR is currently preparing a framework document for the DTT.

²¹ Source: Consultation Paper on Codes of Practice by Cable and MMDS operators for handling consumer complaints. Document No. ODTR 00/95.

7 RADIO SPECTRUM

In February 2001, the ODTR issued a consultation paper (ODTR Document No. 01/06) regarding the management of radio spectrum, which outlines the current spectrum management framework in Ireland and the key issues for spectrum use going forward.



The ODTR seeks to ensure that Ireland has the necessary operational framework in place to maximise economic benefit from radio spectrum while protecting the needs of the wider community. Over the last decade mobile communications, which depends substantially on radio spectrum, has become one of the fastest growing industries. Developments in other spectrum using services and technology such as digital broadcasting and satellite also have the potential to provide significant benefits to industry and consumers.

Decisions about spectrum use have long term implications for the spectrum user, for the consumer, and for the Irish economy overall. It can take many years to change the designated use of particular frequency bands.

Ireland therefore requires a strategy for the future use of spectrum that:

- ☐ Is informed by and informs spectrum management decisions at a European and International level;
- ☐ Takes due account of likely future developments in communications and other spectrum using sectors;
- Takes account of the requirements of Irish users and broader Irish policy objectives;
- Provides users with information to make appropriate investment decisions.

8 POSTAL REGULATION

The Director of Telecommunications Regulation was designated as the National Regulatory Authority for the postal sector on the 27th September 2000, when the EU postal directive was transposed into national law by the European Communities (Postal Services) Regulations 2000 (SI No.310/2000 "the Regulations").



8.1 EU POSTAL DIRECTIVE

The "Postal Directive" establishes a harmonised regulatory framework for postal services throughout the European Union and for securing improvements in the Quality of Service provided and defines a decision-making process regarding further opening of the postal market to competition.

8.2 IRISH IMPLICATIONS

Universal Service Obligation - An Post has been designated as a Universal Service Provider. As a USP, An Post are obliged to deliver letters and postal packages up to 20 KGs in weight at least once a day to the address of every natural and legal person in the state, five days a week. There is to be no licensing of competitors.

Reserved Area - The regulations reserve to An Post the provision of services within the maximum limits laid down by the Postal Directive.²³

Tariff Principles – An Post has to seek the Director's prior approval to increase the charge for any of the reserved services. Charges for other services within the Universal Service Obligation must comply with the principles set out in the Regulations which are established to ensure transparency and non-discrimination in tariffs.

Quality of Service - Responsibility for setting quality of service targets, monitoring performance against those targets, and publishing the results has transferred to the ODTR under the Regulations.

²² Directive 97/67/EC of the European Parliament and of the Council of 15 December 1997 on common rules for the development of the internal market of Community postal services and the improvement of quality of service. OJL 15 21.1.1998, p.14

²² Reserved Area: Currently corresponding to the control of the council of 15 December 1997 on common rules for the development of the internal market of Community postal services and the improvement of quality of services.

Reserved Area: Currently correspondence weighing up to 350 grams and charged at less than five times the standard tariff for an item in the first weight step.

Accounting Separation- Strict separation accounting procedures are to be followed to prevent cross-subsidy from the reserved area to services in the competitive area, except in so far as necessary to cover the additional costs of the universal services.

Consultation papers on all of the above points are due to be published in the first half of this year.

9 REVIEW OF TELECOMMUNICATIONS TARIFFS

This section compares movements in incumbents' tariffs for a range of telecommunication services since the ODTR's last review in December. 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 Irelands position against a group of key countries in relation to telecom tariffs²⁴



The baskets, which are constructed by Teligen using an OECD approved methodology, provide a "snapshot" of Irelands position vis-a-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

9.1 OVERVIEW

Overall the trend in Irelands PSTN tariffs during the quarter has been positive. Both residential baskets have seen improvement during the quarter. In the national residential basket, Ireland improved its position by two rankings since our last review in December. Ireland's position has improved considerably since February 2000 in this basket with seven places being gained. The international residential basket has seen Ireland gain one position since our last review.

Results for the business baskets have been positive also with the national business basket gaining one position and the international business basket retaining its position since the last quarter.

²⁴ For the purpose of our analysis only the EU 15, Iceland, Norway and Switzerland are examined.

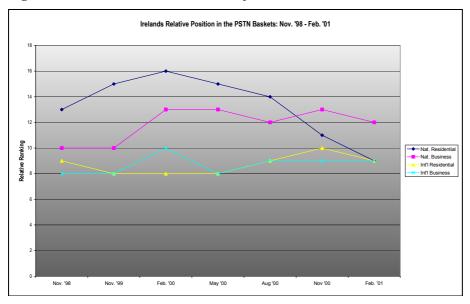


Figure 9.1: Ireland's Relative Position for Various PSTN baskets: Nov. '98 – Feb. '01

There has been very little movement in the leased line basket since our last review in December. Ireland improved one position in the national basket and remained in second place in the international basket²⁵. Ireland has consolidated its strong position in this basket having gained 5 places in the national basket and 6 places in the international basket since February 2000 (See figure 9.2 overleaf).

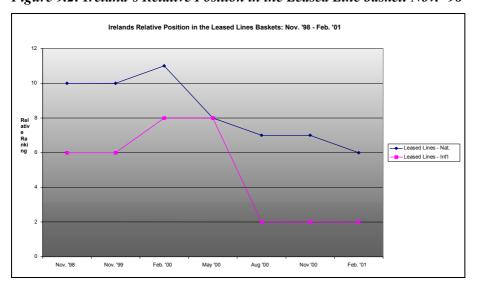


Figure 9.2: Ireland's Relative Position in the Leased Line basket: Nov. '98 – Feb. '01

Page 29 of 1

²⁵ Irelands improved position in the national basket is directly related to the omission of Finland due to no available comparative data since the last quarter.

9.2 NATIONAL RESIDENTIAL BASKET

The "National Residential Basket" examines the average cost of national (including local) calls for the residential sector. Since our last review in December Ireland has gained two positions, moving into 9th place. As illustrated in figure 9.3 Ireland now lies four positions ahead of the OECD average. Ireland has made considerable progress in this basket, improving seven positions in 12 months.

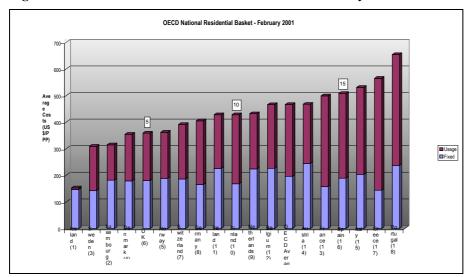


Figure 9.3: OECD National Residential Basket – February 2001

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

9.3 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. Previously in December, Ireland was ranked 13th, one position ahead of the OECD average. In a basket that remained relatively static throughout the quarter Ireland gained one position moving into 12th place, and now lies three positions ahead of the OECD average.

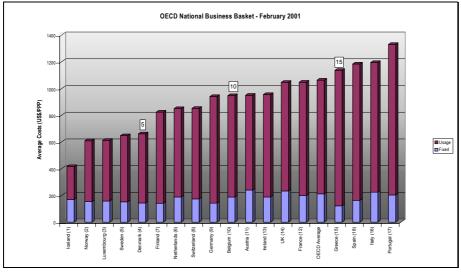


Figure 9.4: OECD National Business Basket - February 2001

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

9.4 INTERNATIONAL RESIDENTIAL BASKET

The "International Residential Basket" sets out the average cost of international calls for residential users. Ireland has gained one place since December, moving into 9th position, and now lies six positions ahead of the OECD average. It can be seen from figure 9.5 that there has been very little movement in the basket since our last review.

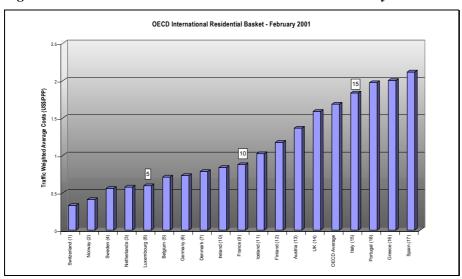


Figure 9.5: OECD International Residential Basket – February 2001

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

9.5 INTERNATIONAL BUSINESS BASKET

Figure 9.6 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 remains in the same position since our last review in December. In 9th position Ireland lies five and six positions ahead of the UK and the OECD average respectively. Like the rest of the PSTN baskets there has been relatively little movement throughout the quarter.

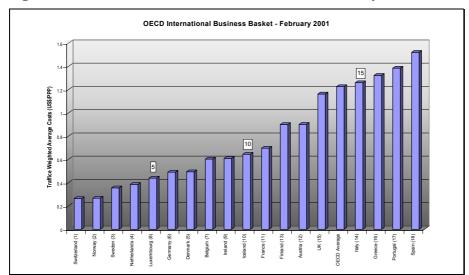


Figure 9.6: OECD International Business Basket - February 2001

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

9.6 NATIONAL LEASED LINES

Using OECD methodology, figure 9.7 compares the cost of various countries national leased line tariffs as at February 2001²⁶. Since our last review Ireland has gained one position and moved into 6th position. There have been no significant developments in this basket with the Scandinavian countries remaining in the upper quartile and Ireland now lies eight positions ahead of the OECD average.

Page 32 of 1

The "National Leased Line Basket" is based on 100 circuits distributed over 6 distances form 2 to 500 km. Results exclude VAT.

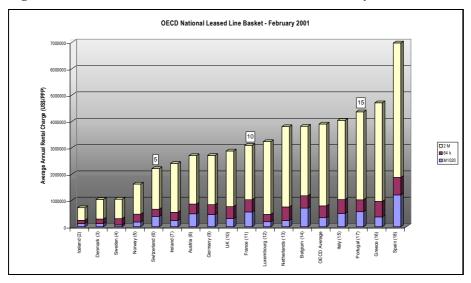


Figure 9.7: OECD National Leased Line Basket – February 2001

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

9.7 INTERNATIONAL LEASED LINES

Using a methodology developed by Teligen, figure 9.8 below sets out the various costs of international leased line tariffs as at February 2001²⁷. Ireland has consolidated its position in the upper decile of this basket remaining in second position for the last three quarters.

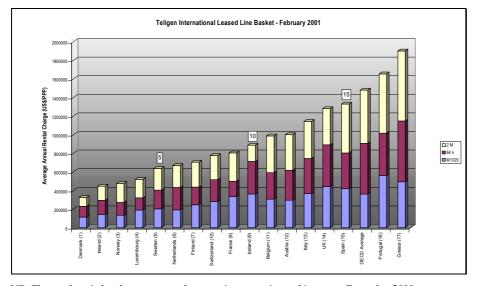


Figure 9.8: OECD International Leased Line Basket – February 2001

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

²⁷ 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.

Page 33 of 1

9.8 MOBILE TARIFFS

The tariff information published in this section is based on basket profiles for personal and business customers typical of usage patterns across the OECD region. We are concerned in this analysis with the retail costs to the end consumer.

As a complex and fast growing industry, the mobile market is represented by a large number of operators across the OECD region. Our aim in the tariff tables shown below is to use incumbent data to show the relative positioning of Ireland's mobile tariffs in relation to the EU region.

The basket indices can only take into account published tariffs from the operators and any fixed costs and free values or free minutes that may be offered as part of the tariff bands marketed by the mobile operators. As with any complex market experiencing competitive pressures each operator will adopt various strategies to attract customers to their networks. For example, in Ireland, as in some other countries, mobile operators have offered subsidised handsets as a strategy to reduce the costs of connecting to the operators network. These costs have to be recovered from revenues and have the effect of distorting comparisons between countries, where handset subsidies are used and other countries where they do not apply. These costs are significant to the operator. Eircell have quoted subscriber acquisition costs €95 for prepaid and €225 for post-paid subscriber²⁸.

Another factor not included in the analysis below is the various pricing initiatives operated by mobile companies. Most operators will offer different peak/off-peak timings, free calls, per second billing, etc as ways of differentiating their network. Like handset subsidies these strategies are adopted by various mobile operator's to different degrees in different EU countries.

²⁸ eircom results 30/9/00

9.9 PERSONAL MOBILE BASKET – POST-PAID

This basket covers GSM or DCS tariffs²⁹. Both reflect post-paid tariffs available from the incumbent fixed network operator's mobile subsidiary. The "Personal Mobile Basket" sets out the average costs of personal mobile tariffs. Ireland has remained in the same position since our last review in December. In 17th position Ireland lies four places behind the OECD average and six places behind the UK.

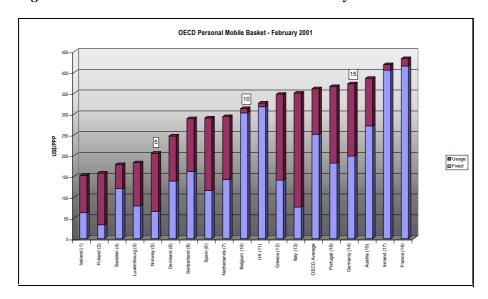


Figure 9.9: OECD Personal Mobile Basket – February 2001

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

9.10 PERSONAL PRE-PAID BASKET

Using data supplied by Phillips Tarifica and ODTR calculations the table below outlines prepaid tariff comparisons for the incumbent fixed network operator's mobile subsidiary³⁰. Ireland lies in 6th position in this basket of 15 operators³¹. Ireland lies two positions ahead of the average. Ireland's position in the upper half of this basket is related to the competitive

²² 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.

³⁰ The basket comprises of 30 minutes of calls, 20% made during peak time and 40% during off-peak time and 40% during weekends. These assumptions are taken from the OECD report on Cellular Mobile Pricing Structures and Trends.

³¹ The incumbent fixed network operator's mobile subsidiary in Finland and Greece are excluded from the basket as the Phillips Tarifica data does not provide comparative analysis. Iceland is excluded as no pre-paid service is offered.

off-peak tariffs offered by the incumbent operator. The pre-paid market in Ireland is important, as the majority of new mobile users are pre-paid (67%).

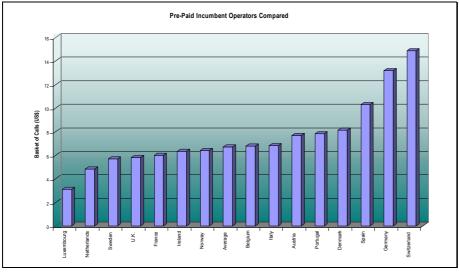


Figure 9.10: Pre-Paid Incumbent Operators Compared

Source: Phillips Tariffica and ODTR calculations

The data is based on US\$ tariffs and are not adjusted for purchasing power parity. Generally an adjustment for PPP would impact Ireland's position more favourably. Call set-up charges, which are not included in the Phillips Tarifica analysis, have been added to the basket. These charges exist in The Netherlands, Italy and Sweden.

9.11 BUSINESS MOBILE BASKET

This basket covers GSM or DCS tariffs. Both reflect post-paid tariffs available from the incumbent fixed network operator's mobile subsidiary³². The "Business Mobile Basket" sets out the average costs of business mobile tariffs. In our previous report issued in December 2000 Ireland was shown at 18th position. Following representations from the ODTR, Teligen re-examined their calculation of Ireland's position within the OECD methodology. This review has resulted in Ireland's relative performance improving to 14th position.

³² 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 portion of the basket follows the basic structure of the International PSTN basket, for business and residential usage. The only difference is that all calls have a duration of 3 minutes.

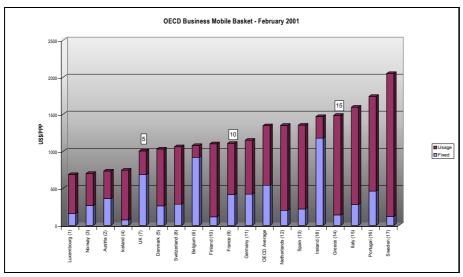


Figure 9.11: OECD Business Mobile Basket – February 2001

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

10 APPENDIX I – LIST OF LICENSEES

GENERAL	Operational	Voice	Infrastructural	Reseller	Other VAS	Responded
LICENSEES		Services	Network			To
						QR
AUCS Communications	√	X	/	×	VPNs, International Call	X
Services (Ireland) Ltd					Centre Solutions.	
formerly known as AT&T						
Unisource						
Aurora Telecom Ltd	×	×	×	×	×	✓
Budget	✓	✓	✓	1	Indirect Access	✓
Telecommunications Ltd					(National/International/Mo	
					bile) Services. Number	
					Translations Services.	
Cable & Wireless Services	✓	✓	1	×	Customer Premises	✓
Ltd					Equipment	
					Frame Relay & ATM	
					Freephone, Direct &	
					Indirect Voice	
Cablelink (Acquired by ntl:)	✓	✓	✓	×	Cable TV services	✓
Cable Management Ireland	✓	×	✓	×	Cable TV & telephony	\checkmark
Ltd					services	
Carrier 1 AG	X	×	×	X	×	×
Cignal Global	×	×	×	X	×	×
Telecommunications	^	^	^	^	^	^
Ireland Ltd						
Heland Etd						
Colt Telecom	×	×	×	×	X	./
						'
Concert Global Networks	×	×	×	×	×	1
Ltd.						·
eircom	√	√	/	×	Global voice, data and	√
					internet	
					services provider.	
Eircell	✓	✓	√	×	Mobile Operator	✓
Esat Telecommunications	✓	✓	✓	×	Global voice, data and	✓
Ltd					internet services provider	
Esat Digifone	✓	✓	✓	X	Mobile Operator	✓
Esat Inland Ltd. (transferred	1	X	/	X	Internet Service Provider	/
from Post GEM)						Ť
<u> </u>				<u> </u>		

GENERAL	Operational		Infrastructural	Reseller	Other VAS	Responded
LICENSEES		Services	Network			To QR
Esat Net	√	×	√	×	Internet Service Provider	√
Formus	√	✓	✓	×	Wireless local loop voice & data services.	√
GTS Business Services (Ireland) Ltd	√	✓	√	1	Carrier and access services; Internet services; callcards	√
IDT Europe BV Lts Liability Coolder	×	×	X	×	X	√
Interoute Ireland Ltd	V	V	1	✓	Residential & Business CPS Carrier Access. Prepaid Accounts and cards.	✓
ITG Group (IRL) Ltd.	√	×	1	x	EPOS Equipment Payphones CPS on Voice Land-Line Traffic	✓
IXC Communications Services Europe Ltd.	×	×	х	×	×	×
LCN-Ireland, L.L.C.	×	×	X	×	×	×
LDMI Telecommunications of Ireland (previously known as Vianvi Ltd)	×	×	X	×	×	X
Mastercall International Ltd	×	X	X	×	×	×
WorldCom	/	√	1	×	Int'l frame relay, int'l freefone service into Ireland, Nat. & Int'l VPNs.	√
Meridian Communications Ltd. (formerly known as ACCess Telecom)	✓	√	×	1	Resale of mobile telephony services	√
NTL (UK) Group, Inc.	1	х	✓	×	Leased Lines and Broadcasting Transmission Services.	√
Ocean Communications Ltd	√	✓	✓	×	Complete voice, data and internet Service provider.	√

GENERAL	Operational	Voice	Infrastructural	Reseller	Other VAS	Responded
LICENSEES		Services	Network			To
						QR
PrimeTEC UK Ltd	×	×	X	×	×	×
Primus Telecommunications Ltd	×	×	×	X	×	×
Princes Holdings Ltd	√	✓	√	×	Cable TV & telephony services	√
RSL Communications (Ireland) Ltd	x	×	×	×	X	X
S.M. Communications (T/A Worldlink)	√	1	×	1	Prepaid Services	1
Smart Telecom	×	×	×	X	×	1
Startec Global Communications UK Ltd.	×	X	×	×	X	×
Stentor Communications Ltd	V	√	/	1	Call centre and VPN solutions Callcards	√
Suir Nore Relays Ltd	✓	×	1	×	Cable TV and telephony services	√
Swiftcall Centre	V	V	×	✓	Indirect Access & CPS Telephony Internet & Callcard Services Call Centre Services	1
Tele2 Telecommunications Services Ltd.	х	×	×	×	X	√
Teleglobe Ireland Ltd	×	×	X	×	×	1
Torc Telecom	1	√	×	1	Re-selling long distance domestic & international services; callcards.	V
Transaction Network Services Limited	V	X	×	×	Dial-up access for point of sales.	√
VarTec Telecom (UK) Ltd.	×	×	X	×	×	1
Viatel (I) Ltd.	×	×	X	×	×	1
WTI Ireland Ltd.	X	×	X	×	×	1

GENERAL	Operational	Voice	Infrastructural	Reseller	Other VAS	Responded
LICENSEES		Services	Network			To
						QR
Yac.com Ltd.	×	X	X	Х	×	√

BASIC LICENSEES	Operational	Voice	Infrastructural	Reseller	Other VAS	Responded
		Services	Network			To
						QR
Alord Holdings Ltd (T/a	1	√	×	✓	Pre-paid/Post paid	√
Switchcom)	'	V		V	residential service.	•
AT&T Global Network Services	1	×	/	×	Dial up and leased	/
Ireland Ltd.					line services	-
Broad Band Communications Ltd.	Х	×	×	X	×	√
Cargo Community Systems Ltd.	✓	×	✓	X	e-commerce	✓
					solutions	
Casey CableVision Ltd.	✓	×	✓	X	Cable TV	×
					Limited internet	
					services	
Conduit Enterprises Ltd	✓	×	✓	X	Nat. & Int'l	✓
					directory enquiry	
					services	
Energis (Switz.) AG formerly	X	X	×	X	×	✓
known as Unisource Carrier						
Services AG.						
EGN B.V.	✓	×	✓	X	relay services for	✓
					multinationals	
Genesis Internet Service Provider	X	X	×	X	×	
Ltd.						·
Genuity International Inc.	X	X	×	X	×	×
(formerly known as GTE						
Internetworking International						
Corporation)						
Global Crossing Ireland Ltd.	✓	×	✓	×	Carriers' carrier	✓
			-			
Global One Communications Ltd.	✓	×	 	×	ATM Switching	✓
Hibercall Ltd.	✓	✓	X	\checkmark	Prepaid &	✓
					Postpaid Services,	
		.,	-	.,	Callcards	
Indigo	✓	×	✓	×	Internet Service	✓
					Provider	

BASIC LICENSEES	Operational	Voice	Infrastructural	Reseller	Other VAS	Responded
		Services	Network			То
						QR
Iridum Communications Germany	×	×	×	×	×	X
GmbH.						
IXNET UK Ltd.	✓	×	✓	X	Limited service to	✓
					banks.	
Lake Communications System	✓	×	✓	×	ISDN, business	✓
					solutions	
MediaNet Ireland Ltd	✓	×	✓	×	Internet business	X
					solutions	
Next Telecom	×	×	×	×	×	X
QoS Networks Limited	×	×	×	×	×	X
Reuters Ltd T/A Reuters Connect	/	×	1	×	Private wire	X
Services.	'				services.	
Rillbank Limited	X	X	X	X	×	/
						•
Savvis Europe B.V.	X	X	×	X	×	X
Sonic Telecom	X	×	×	X	×	✓
Société Internationale de	✓	×	1	X	Managed data	Х
Télécommunications					network access	
Aéronautiques					services for the	
					airline industry	
TCS (Ireland) Ltd.	✓	✓	×	×	Voice Telephony	✓
					services via the	
					Internet.	
Tele Media International Ltd.	×	×	X	×	×	X
T: 1.1/T/A C 11 1 1 1		X		×	F 1	
Timas Ltd (T/A Galileo Ireland)	✓	×	✓	X	Frame relay	✓
					service for travel	
Valuetel Ltd.	,	-	X	,	agents Re-selling long	,
v andelen Liu.	✓	✓	_ ^	✓	distance domestic	.√
					& international	
					services; callcards	
Web-Sat Ltd.	/	×	./	×	Internet access via	√
	'				satellite;	.♥
					SMG news	
					services.	
		I	I		I	