

The Irish Telecommunications Market After Two Years of Liberalisation

Quarterly Review

December 2000

Document No. ODTR 00/91 1st December 2000

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 INTRODUCTION	3
2 REGULATORY DEVELOPMENTS	4
2.1 Licensing	
2.2 Enabling Competition.	
3 MARKET OVERVIEW	
3.1 FIXED LINE SERVICES.	
3.2 MOBILE COMMUNICATIONS	13
4. REVIEW OF TELECOMMUNICATIONS TARIFFS	18
Overview	18
4.1 NATIONAL RESIDENTIAL BASKET	
4.2 NATIONAL BUSINESS BASKET	21
4.3 INTERNATIONAL RESIDENTIAL BASKET	23
4.4 International Business Basket	23
4.5 NATIONAL LEASED LINES	
4.7 RESIDENTIAL MOBILE BASKET	
4.8 BUSINESS MOBILE BASKET	26
APPENDIX 1 – LIST OF LICENSEES	28
APPENDIX II – IMS SURVEY	33
SME TELECOMMUNICATIONS SERVICES SURVEY	33

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 Introduction

This review summarises the developments in the Irish Telecommunications sector in the period since our last review on 28th September 2000. The review includes:

- A general overview of regulatory developments in the Irish Telecoms market
- A market overview discussing recent market developments
- A summary of sector restructuring and changes in company ownership
- An international comparison of telecommunications tariffs
- Appendix I includes a full list of licensees in Ireland and their areas of activity;
- Appendix 11 contains the detailed report of a survey of 200 SME's commissioned by the ODTR.

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

List of companies who responded:

Budget Telecommunications Ltd. ITG Group

Cable & Wireless Meridian Communications (T/a Imagine!)

Cargo Community Systems Ltd ntl:

Chorus S.M. Communications (T/a Worldlink)

Eircell Stentor Communications

eircomSwiftcallEsatTimas Ltd.Esat DigifoneTNS Ltd.GTS Business Services (Ireland) Ltd.ValuetelHibercall World Telecom (T/a Torc Telecom)Worldcom

Interoute World Telecom (T/a Torc Telecom)

2 Regulatory Developments

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

2.1 Licensing

Geographic Number Portability (GNP) became operational with effect from the 30 November 2000. GNP facilitates the transfer of a customer from one operator to another by enabling such customers to retain their existing number. This means that the costs of and barriers to transfer will be considerably reduced. It is expected that this will initially appeal to small and medium sized businesses and also to residential customers. Along with the entry of cable operators into the telecommunications market this facility is expected to increase the level of competition in the market by reducing the barriers to change. Number portability for non-geographic numbers such as Freephone was introduced in January 2000.

In April 2000 the ODTR issued Decision notice D6/00 mandating the introduction of a form of Local Loop Unbundling (LLU) - bitstream access - by April 2001. Under an EC Regulation full copper unbundling will be required from the beginning of next year. This requirement has been included in our LLU working group programme, in addition to the bitstream product for which we have an identified demand, and for which trials are underway. The ODTR requested that eircom submit a draft reference offer for scrutiny by end November and we expect that an *eircom* Reference Offer for copper will be published by 31/12/2000. The implementation of LLU will aid the overall growth of the telecommunications market while complementing alternative access infrastructure and providing delivery of new services.

In October, the ODTR initiated a consultation as part of a long planned general review of Service level Agreements (SLAs) that are currently offered by *eircom* to other telecommunications operators for carrier Services. Following this consultation, a Decision Notice (ODTR 00/88) was published in November which provided for changes to the SLAs. The main changes incorporated under the SLA regime include, inter alia, new timeframes for delivery of services and an uncapped penalty regime in the event of *eircom* failing to meet the standards stipulated in the SLAs. The ODTR will also be convening an industry forum, which will further clarify the processes under the SLA and ensure that all parties have the appropriate understanding of their respective roles and responsibilities. These changes are effective from 15th September 2000.

Following the publication of the Decision Notice, which replaces the Direction of August last, proceedings initiated by *eircom* on 7th September 2000 against the Director have been concluded.

Following consultations with the industry on expanding the market for Fixed Wireless Access (FWA) the Director announced details of a further two additional broadband wireless licences and the readvertisment of one narrowband wireless licence. Fixed Wireless Access (FWA) sometimes referred to as "Wireless in the Local Loop", offers a radio based alternative to copper or fibre optic cable in the local loop, which at present connects the majority of residential and business customers to their local exchange. Fixed Wireless Access will accommodate such services as high speed Internet access, multi media, bandwidth on demand and fast file transfer. The demand for high bandwidth services is expected to increase in the coming years with FWA services focusing on data rather than voice.

A public consultation paper on *eircom*'s Draft Code of Conduct Concerning Selling Practices was initiated by the director. The paper seeks views on whether the draft Code of Conduct addresses *eircom*'s obligations to avoid unfair or anti-competitive practices and whether the guidelines are exhaustive and explained in sufficient detail. The Director welcomes comments from the telecommunications industry, telecommunications users and consumers on this draft code. The consultation period will run to 5th December, 2000.

In November, the Director issued a consultation paper to examine the market for directory information services in Ireland and invited comments on how competition in this market can be improved. The purpose of the paper is to identify and remove any barriers that hinder the development of full effective competition.

The Director also issued a consultation paper on mobile numbering and mobile number portability in Ireland. The Director believes there is a real risk that given the growth in the number of mobile users to date that we could run out of mobile numbers by late 2002. The most beneficial solution from the consumer perspective would be the introduction of full mobile number portability but this will take some time to implement. In the mean time a number of minor interim adaptations to the current numbering scheme are proposed.

In the period up to the end of November 2000, one additional Basic licence was awarded, bringing the current total to 31. The number of General licences remains the same at 46. To date 25 of the 46 General licences and 21 of the 31 Basic licensees have commenced operations offering a variety of telephony and network services to both Irish and international users (see Appendix 1 for details).

2.2 Enabling Competition

Small Business Telecommunications Survey

The provision of competitively priced services, with support services to ensure quality is maintained, is key to building a vibrant Telecommunications market.

For this quarterly report the ODTR commissioned a survey to assess the attitudes of SMEs to the services provided by telecom operators; the quality of those services and the extent of competition operating in this vital business sector.

The SME sector is seen as key to the development of Ireland as a leading e-commerce hub in Europe. The sector has been a focus of industrial policy in Ireland for some years and is important in terms of job creation, technical innovation and competitiveness in the economy. The sector needs transport infrastructure, skills availability and a stable macroeconomic environment. In addition, to foster the e-revolution, SME's require a competitive telecommunications environment and a national telecommunications infrastructure which not only delivers competitively priced voice services but broadband access for data and e-business needs. Increasingly e-business is being seen not just as trading on-line but also as a method of leveraging technology to reduce costs and increase productivity.

The survey,² conducted by Irish Marketing Surveys, interviewed 200 nationally representative SME companies. The survey sample included 58% of companies with less than 10

_

¹ This total does not include the licence originally awarded to NASC Teoranta (T/a IOL), but recently surrendered to the ODTR. IOL continues to trade, but now operates under Esat Telecom's licence.

² Care should be exercised in interpreting the data in the survey report. All responses are given equal weight and the value and volume of business for each respondent was not assessed. Thus, percentages

employees; this size of enterprise represents almost 90% of all businesses in Ireland³. Of the companies surveyed 66% said they spent up to IR£10,000 on Telecommunications annually and a majority of respondents said that telecommunications accounted for at least 10% of their total costs.

The survey, which is published in full in Appendix II, reveals that the SME sector believes the telecommunications market is more competitive and that as a result of that competition the overall cost of telecommunications has decreased. When asked if they believed the telecommunications market was more competitive than 12 months ago, 95% either agreed or agreed strongly. When asked if the overall cost of telecommunications has decreased in the last 12 months 85% either agreed or agreed strongly. The SME sector is also well informed of recent developments in the telecommunications sector with 89% of respondents aware of Carrier PreSelection and when asked to name a supplier of CPS 84% responded with the name of an operator currently active in the market.

The respondents to the survey were generally satisfied with their telecommunications supplier. The chart below shows satisfaction ratings of current suppliers across four different performance areas.

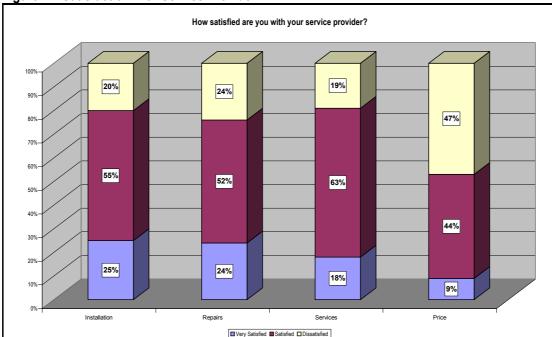


Figure 2.1 Satisfaction with Service Provider

Source: IMS Survey

The high satisfaction levels of respondents may be attributed to the emphasis SME's in our survey placed on quality of service over price. When asked if they agreed that when choosing a telecommunication supplier they placed more importance on quality of service than the price, 68% either agreed or agreed strongly with the statement.

A recent survey conducted by Excellence Ireland reinforces the view that Irish consumers in general are satisfied with their telecommunications provider. The survey placed Irish

generally represent the number of respondents who answered rather than the value or volume of business that such a respondent represent. Care should also be exercised in linking to stated preferences such as price or quality issues and the future actions of respondents.

³ Forfas Annual Competitiveness report 1999

consumers among the most satisfied in Europe.⁴ The European Consumer Satisfaction Index ⁵(ECSI) was used to measure satisfaction in 12 countries. In the mobile phone sector, the industry average for Ireland was 71, about 2.5 points above the European average.

This emphasis on quality over price and the general level of satisfaction should not detract however from the high percentage of SME's who have switched from the incumbent supplier. The chart below shows the percentage of respondents who have switched supplier in each call segment.

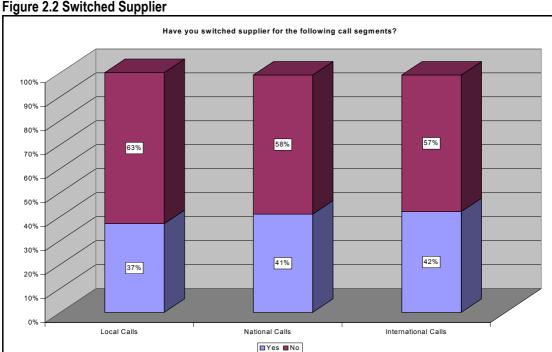


Figure 2.2 Switched Supplier

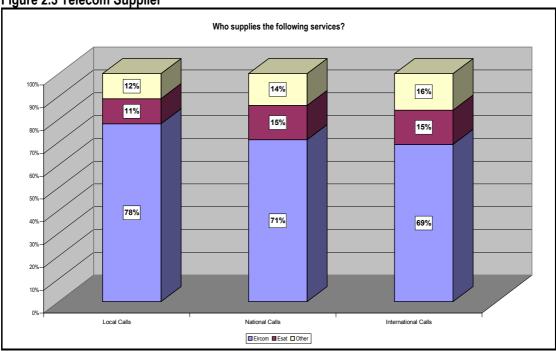
Source: IMS Survey

For each call segment the survey asked who provided their telecommunication services. The chart below shows the responses.

⁴ This new index was compiled from 1,800 questionnaires administered by the MRBI during July and

⁵ The index is based on a methodology developed by the Stockholm School of Economics. It includes feedback on consumer expectations, perceived value of product or service and the relationship between price and quality.

Figure 2.3 Telecom Supplier



Source: IMS Survey

The main reason cited by respondents for switching service provider was the ability to reduce costs. In excess of 85% of respondents in each market segment stated that the price of services was the reason for switching supplier. In terms of attitudes 78% either agreed or agreed strongly with the view that changing telecommunications supplier could make savings.

The loyalty of many SMEs to the incumbent operator is clear from the above findings. It is also a trend evident in Europe. Recent surveys of SMEs in the UK show that 92% of respondents used the incumbent for some or all of their telecommunication needs. In the Netherlands and Sweden the figure is 86%. There are a variety of reasons offered by SME's as to why they stay with the incumbent, the most popular being familiarity with the established supplier. Of the SME's surveyed in Europe the main reason for switching supplier was to cut costs. Of UK SME's who switched 76% said it was cost related.⁶

The ODTR/IMS survey also examined attitudes to mobile and mobile usage. In terms of mobile usage, only 13% of respondents did not have a business mobile phone with 68% saying they had two or more phones in use in their business. As with fixed line segments there is a high percent that have not switched mobile supplier with 62% of those who have not switched saying they are happy with the current level of service. Of those who have switched mobile supplier 41% said they switched to avail of price reductions and 31% because of reception/coverage issues.

The survey also examined the use of leased lines and ISDN, and found that 62% of SMEs said they had no ISDN lines and 88% said they had no leased lines.

In the coming quarters the ODTR will be commissioning further surveys on attitudes to the telecommunications market

_

⁶ From 'Customer Perception of Pricing and use of data comms in Europe 2000' a speech by Margrit Sessions of the Phillip group to the 5th Global Pricing Conference in March 2000.

New Issues Conference

Almost 200 delegates attended the conference organised by the ODTR in October. Entitled "New issues in the Telecoms Sector 2002-2010", the conference was specifically aimed at identifying and prioritising new issues facing the sector with a view to developing future regulatory plans. The conference specifically looked at global trends and developments over the next decade and considered how Ireland can achieve the maximum overall economic prosperity from the communications sector. A panel of distinguished national and international speakers put forward their ideas on a range of topics.

International speakers, that included Kevin Power, Chairman of the board of ECTA⁷, David Cleevley, Managing Director of Analysys Group and Alan Tumolillo, Senior Vice – President and Chief Operating Officer, Probe Research Inc., USA can be found on our website (Doc. No. ODTR. 00/80) along with their presentations. Their contributions will help the ODTR develop regulatory plans to assist in the realisation of the vibrant communications industry in Ireland and to anticipate where market developments and technological innovations are heading.

A series of workshops run in conjunction with the conference followed up on some of the new issues raised by the speakers. The following are some of the main issues that were discussed in the workshops and then presented to the conference, - Infrastructure, Power of incumbency, Threats to quality and continuity of service, Scarcity of resources, Convergence, divergence and bundling, Stability versus technological evolution, Universal service and social inclusion and Maturing of the sector. A brief summary of the issues highlighted will also be available on the ODTR website shortly.

The ODTR is looking to the future, having already put in place many of the basic regulatory measures. Some of the key new issues developed through the workshops are currently being examined by the ODTR in relation to their future relevance on the market and the regulatory environment. The future can indeed be difficult to forecast, especially in a fast moving sector such as telecoms. It is also important to bear in mind that regulation facilitates not dictates the future. So, while regulation can help in introducing a degree of stability to a turbulent market place, it cannot eliminate uncertainty and risk.

⁷ European Competitive Communications Association.

3 Market Overview

Since our last review in September, the Irish telecommunications sector has continued to experience expansion, with almost all segments of the market experiencing increased demand. Based on figures from the operators for the quarter to September 2000, the ODTR estimates that total revenues for the fixed, mobile and broadcasting markets are now worth over IR£2 billion a year. Given the steady reduction in prices during the past 12 months, the growth in traffic volume should comfortably exceed this figure. Expressed as a proportion of total national output, the telecom sector is now estimated to account for approximately 2.9% ⁸ of Irish GDP. Based on revenue data supplied by the operators for the three months to September 2000, the ODTR estimates that the new entrants' share of the fixed line market has increased to over 17%.

The ODTR estimates that as of the end of September there were over 120,000 ⁹ business & residential subscriber lines using CPS. ¹⁰ This figure, however, underestimates the real level of competition as many businesses have dedicated leased line connections. The ODTR expects the growth in the new entrants' share of the fixed market to continue, in particular with the introduction of geographic number portability ¹¹ from today and the continued roll-out of OLO services.

3.1 Fixed Line Services

At the end of September 2000 the number of PSTN lines remained relatively constant standing at just over 1.59 million. This figure, comprised of approximately 1.09m residential lines and 0.5m business lines, is not likely to increase rapidly, given the increasing popularity of mobile and businesses' growing reliance on ISDN and dedicated leased line connections. Using the latest population figures available¹², the total number of PSTN lines per 100 inhabitants stands at just under 42, still below the EU average of 48.5 ¹³. However, given the rapidly changing mix of access technologies being deployed, the relative importance of this indicator has diminished. A better indicator of the level of adoption of telecom voice services is the number of telecom access paths. A telecom access path has the equivalent voice carrying capacity as an ordinary PSTN telephone line, but could also include access being provided by mobile lines and ISDN access channels. As can be seen from figure 3.1 below, this indicator better captures the growing contribution of mobile as a means of communication in Ireland today. With mobile lines accounting for over 2 million of the 3.8 million telecom access paths, mobile phones have surpassed fixed PSTN lines as the most popular means for voice communications.

⁸ Figure calculated using GDP at Market Price–ESRI, Quarterly Economic Commentary, September 2000.

⁹ This figure represents the number of subscribers measured in Caller Line Identification (CLIs)

¹⁰ 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.

¹¹ Number portability refers to the ability of end-users to retain their telephone numbers when they change their network operator or service provider, their location or their service. December 2000 marks the completion of the introduction of this service.

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

¹³ Source: www.newentrants.com EU average figure for 1999.

Total Number of Telecom Access Paths 3.851 4,000 3,624 3,500 3,000 2,500 000's of access paths 1,860 ■ June '00 2,000 ■ Nov. '00 1,590 1,593 1,500 1,000 500

Figure 3.1: Total Number of Telecom Access Paths

Source: ODTR Quarterly Review Questionnaire

While the breakdown of telecom access paths can generally be used to measure the differing technologies deployed for voice communications, the level and growth of data communications can best be determined by looking at the number of leased lines¹⁴. Given their ability to carry large amounts of information and data, leased lines are becoming increasingly important for facilitating the growth and development of e-commerce. The total number of leased line circuits in Ireland has increased by over 5% since the previous quarter, increasing from 36,896 as at the end of June to 38,879 as at the end of September 2000.

¹⁴ A leased line is a dedicated telecom line that has been leased for private use. By contrast with PSTN and ISDN lines, it is not a switched or dial-up line. Typically, large companies rent leased lines from the telecom operators to interconnect different geographic locations in their company.

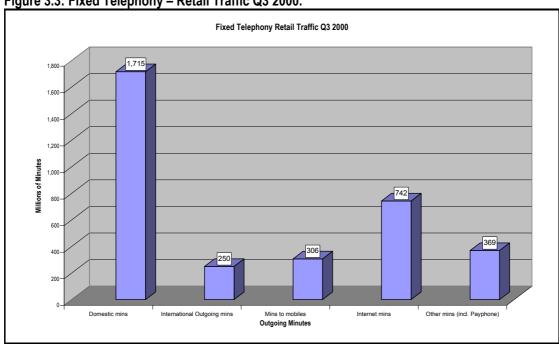


Figure 3.3: Fixed Telephony – Retail Traffic Q3 2000.

Source: ODTR Quarterly Review Questionnaire

Figure 3.3 illustrates a breakdown of Fixed Telephony Retail Traffic as at the end of September. The minutes are broken down in to Domestic, International Outgoing, Mobile, Internet and Other minutes (including payphone).

Table 3.1: Fixed Services offered in the residential markets.

Operator	International	Long Distance	Local
Chorus Communications	~	~	~
eircom	V	~	V
Esat Telecom *	~	~	~
Hibercall	~	~	~
Interoute Ireland Ltd.	~	~	~
ntl	~	~	~
SM Communications	V	~	×
Swiftcall	~	~	~
Switchcom	V	~	~
Torc Telecom	V	×	x
Valuetel	V	~	X

* Owned by BT

Source: ODTR September 2000.

3.2 Mobile Communications

One of the key indicators of the vibrancy of the mobile market is the penetration rate. The Irish mobile penetration rate has maintained its upward trend, rising from 49% at the start of June 2000 to 54% at the start of November 2000. Iceland has the highest penetration rate in Europe at 75%. However, Ireland's penetration rate has seen very impressive growth levels since liberalisation 2 years ago. The growth in the mobile market is expected to continue and the ODTR estimates that this level will rise to over 60% by the end of the year.

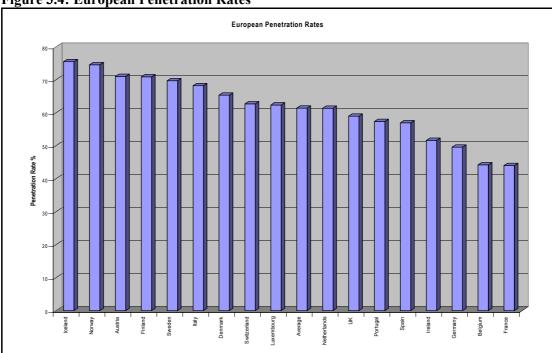


Figure 3.4: European Penetration Rates

Source : FT Mobile Communications, 31st October 2000

The total number of mobile subscribers now stands at just over 2 million. Eircell continues as the larger operator with a reported market share of approximately $60\%^{15}$.

Both operators announced new customer packages during the quarter. Eircell announced a new payment option called Alltime, which offers Eircell customers two bundles of talk-time Esat Digifone announced a new mobile communications package in association with the Chambers of Commerce of Ireland (CCI). Imagine, the mobile service provider, announced details of a new service called Mo (mobile office) for business users. Mo provides each customer with a single number to manage office, home and mobile phones as well as fax and e-mail services.

The mobile operators and resellers have also launched special package deals aimed at SME's that have one or more phones. The package deals allow SME's to buy mobile minutes, enabling users to share minutes between them. These packages result in considerable savings for SME's on their mobile bills.

_

¹⁵ Source: FT Mobile Communications, October 30th 2000.

Ireland's Mobile Penetration Rate: June '99 - Nov '00 54% 55% 51% 49% 50% 45% 45% 41% 40% 34% 35% 29% 30% 25% 20% 15% 10% 5% 0% Jun '99 Sep '99 Dec '99 Mar '00 June '00

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

Source: FT Communications - Various editions. * Nov '00 - ODTR Quarterly Review Questionnaires

This growth in mobile subscriptions is expected to continue in the coming months where traditionally the Christmas period has been a strong driver of demand. Both Eircell and Digifone see growth opportunities in mobile data services and have launched their own web portals and ISP services. Using these services subscribers can now receive email alerts, download information from the Internet and have a computerised voice read out emails over the phone.

Short Messaging Service (SMS) messages have achieved considerable growth worldwide in the last year, with 9 billion SMS messages sent in August 2000. In light of these figures the GSM association has revised its end of year SMS forecast from 10 billion messages per month to 15 billion messages per month worldwide. GSM customers represent over 60% of today's wireless market, with 365 million users worldwide.¹⁶

_

¹⁶ Source: Yankee Group Research Notes, October 10th 2000.

3.3 Internet & Multimedia

Since our last review in September, the residential Internet market in Ireland has continued to experience steady growth. Internet penetration in Ireland is continuing to increase, but users are being increasingly selective about the sites that they are visiting. Nielsen NetRatings estimate that as of September there are now over one million people with access to the internet from home in Ireland. This figure of one million users represents a 50% increase from March this year. A similar 48% increase in the number of actual surfers since March has also been recorded and Internet penetration in Ireland now stands at around 30%. ¹⁷

However the proportion of adults who are actually surfing the net is less than half the current internet universe, with 500,512 active internet users¹⁸.

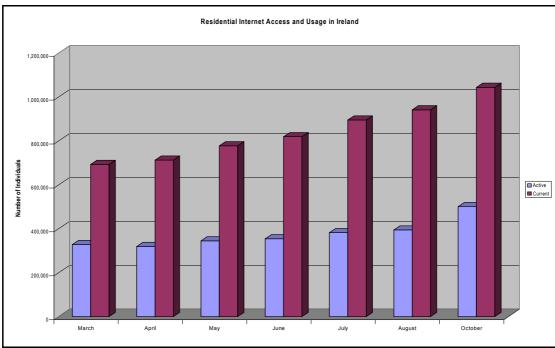


Figure 3.6: Residential Internet Access & Usage in Ireland

Source: Neilsen // NetRatings, October 2000. Notes: Current Internet Universe: All individuals 2+ who have access to the internetfrom home i.e. penetration. Active Internet Universe: All individuals 2+ who accessed the Internet from home i.e. usage

Of those people who do choose to use the Internet at home, the amount of time that they spend online has decreased since our last review in September. According to Nielsen's Internet figures the average Irish home user spent over 4 hours and 01 minute online in October¹⁹.

¹⁹ Source: Neilsen NetRatings, October 2000.

¹⁷ Source: Neilsen NetRatings, September Press Release 2000.

¹⁸ Source: Neilsen NetRatings, October 2000.

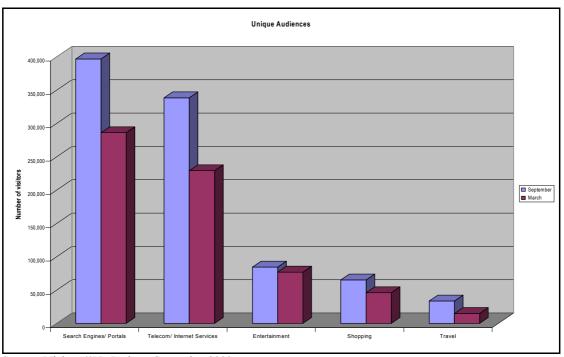
Table 2: Average Internet Usage for Ireland, the UK and the US, Oct 2000.

	United States	Ireland	United Kingdom
Number of Sessions per Month	19	8	11
Number of Unique Sites Visited	10	17	16
Time Spent per Site	59: 00	14: 20	19: 18
Time Spent per Month	10: 04: 05	4: 01: 03	5: 15: 23
Time Spent During Surfing Session	31:53	28: 30	29 :15
Duration of a page viewed	00:50	00: 46	00: 46
Active Internet Universe (actually surfed)	91,147,552	500,512	9,409,533
Current Internet Universe Estimate (those who had access, but did not necessarily go online)	149, 599, 423	1, 044, 103	19, 471, 802

Source: Nielsen//NetRatings, October 2000.

Search Engines and Internet Services still remain the most popular sites visited by users. There has been a growth in the number of sites visited, which coincides with the increase in the penetration rate. The most popular site visited in October was yahoo.com with a unique audience of 278,013. Travel sites have experienced a growth of 126% since March, most notably with airline companies receiving a large percentage of online bookings. The number of visitors to entertainment, and travel sites are affected by seasonality while shopping sites have been showing steady growth in unique visitors.

Figure 3.7: The number of unique visitors by category



Source: Nielsen // NetRatings, September 2000.

The number of internet hosts per 1,000 inhabitants has been growing, and reached 36.4 in January 2000. From January 2000 to July 2000 the number of internet hosts increased by

44.5%, reaching 52.6 per 1,000 inhabitants²⁰. This rapid increase in internet hosts indicates the vibrancy and continued activity in the Irish internet market.

Double digit growth in Internet accesses, and in those people who actively surf the Internet, is not just an Irish phenomenon. However what is unique to Ireland is the magnitude of the increase in the number of people accessing and surfing the internet over a five month period.

_

²⁰ Source: Internet Software Consortium, Internet Domain Survey.

4. Review of Telecommunications Tariffs

This section compares movements in incumbents' tariffs²¹ for a range of telecommunication services since the ODTR's last review in September. 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 tariffs. The baskets, which are constructed by Teligen²² using an OECD approved methodology, provide a "snapshot" of Irelands 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
- Mobile Residential Basket
- Mobile Business Basket

Overview

Overall the trend in Irelands PSTN tariffs during the quarter has been relatively static with one exception. In the national residential basket Ireland improved its position by 3 rankings since our last review in September. This is largely due to *eircoms* reduction in the minimum call charge by 56%, from 11.5p to 5p. In the international baskets and the national business basket Irelands position has slipped slightly, with a drop in one ranking in each of these baskets. Despite the drop in rankings Ireland still remains ahead of the UK and the OECD average in these 3 baskets. The drop in Ireland's position in three of the baskets is directly related to the improvements made by both Belgium and Germany during the quarter. Both countries gained 12 and 6 positions respectively in the international residential basket during the quarter.

Although prices have dropped considerably in all sectors since the introduction of competition two years ago, for Ireland to improve its competitiveness it needs not only to reduce its prices, but also to reduce them to a rate lower than its international rivals.

²¹ It should be noted that competing operators sometimes offer cheaper tariffs and this would also be true in the other countries surveved

²² When the full Basket is dispatched more up to date exchange rates may result in slight differences in the results.

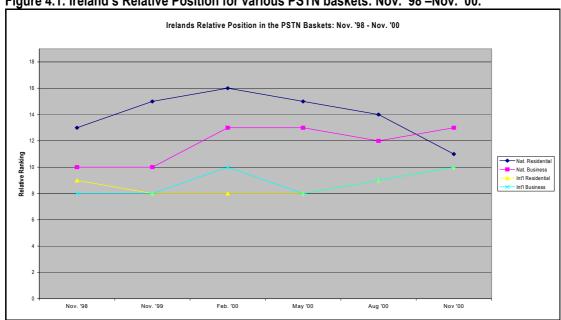
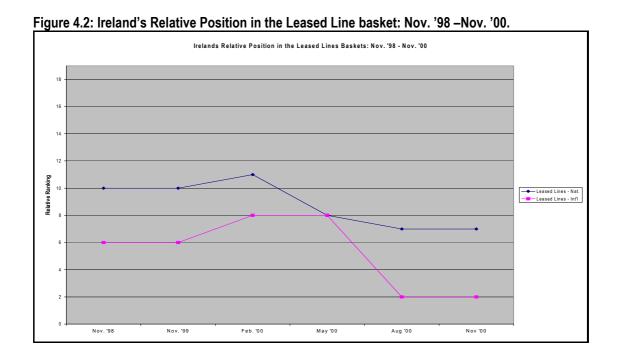


Figure 4.1: Ireland's Relative Position for various PSTN baskets: Nov. '98 -Nov. '00.

The leased line basket has remained relatively static since our last review in September (See Figure 4.2 overleaf). With Ireland retaining its position in both the national and international baskets. Ireland has now consolidated its strong position in the international leased line basket by retaining 2nd position just behind Denmark.

In the national leased lines basket the top 7 countries have retained their positions since the last quarter. Ireland retained its 7th position with Austria making the only significant improvement, from 12th to 8th position. This basket remains dominated by the five Scandinavian countries that are considerably ahead of the other countries in terms of national leased line prices.

Since the ODTR's last review in September there has been very little movement in the mobile baskets. Ireland remained in 18th position in the residential basket, however it dropped one place to 19th position in the business basket. There was a considerable amount of movement in both baskets throughout the quarter, with Luxembourg gaining 6 places in the business basket to move into first place. Irelands position in this basket is expected to improve with the introduction of Meteor into the market early in 2001. Summary charts for the residential and business mobile baskets are provided in Figures 4.9 and 4.10 respectively.



4.1 National Residential Basket²³

The "National Residential Basket" examines the average cost of national (incl. local) calls for the residential sector. Previously in September, Ireland was ranked 14th amongst 19 key countries, and 2 positions behind the OECD average. As illustrated in figure 4.3 Ireland has gained 3 positions and now lies 5 positions ahead of the OECD average. In a basket that saw very little movement, Ireland lies in 11th place, with the top eight countries all retaining their positions. Ireland has made continued progress in this basket, improving 5 rankings since February 2000.

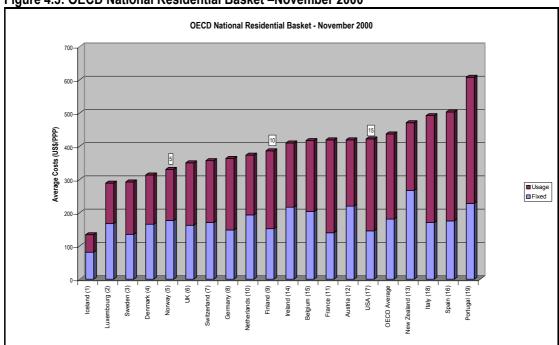


Figure 4.3: OECD National Residential Basket -November 2000

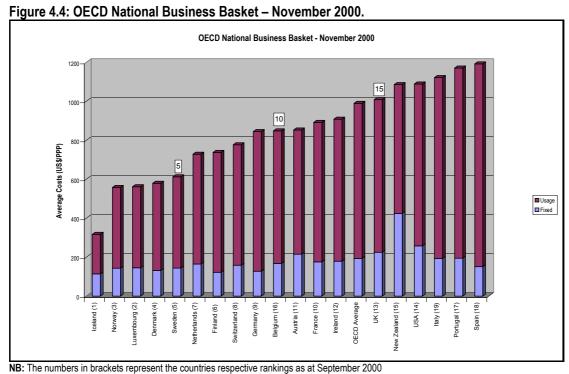
NB: The numbers in brackets represent the countries respective rankings as at September 2000.

4.2 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. At the ODTR's last review in September Ireland was ranked in 12th place, one position ahead of the UK and two positions ahead of the OECD average. Ireland dropped

²³ The 'National Baskets' are based on a fixed number of calls. This call volume level will not change from update to update as before, based on the fixed / usage relationship. The Residential basket call volume is set at 1200 calls, distributed over 14 different distances from 3 to 490 km, at 6 different times of the day (4 in the week and 2 in the weekends), and four different durations, depending on the time of day and distance. The business basket call volume is set at 3600 calls, distributed over 14 different distances from 3 to 490 km, and 6 different times of day (4 in the week and 2 in the weekends). The national business call duration is now set at 3.5 minutes, regardless of the time and distance. The Baskets are calculated using average calls, while the residential basket includes VAT; the business basket excludes VAT. For the purpose of this document we focus largely on European countries, although it is important to note that the 'OECD average' figure represents the average cost for all the 29 OECD countries.

one ranking in this quarter and moved into 13th place but still ahead of the UK and the OECD average.



avoluge.

4.3 International Residential Basket²⁴

The "international residential basket" sets out the average cost of international calls for residential users. In our last review, Ireland was ranked in 9th position, six rankings ahead of the UK and nine ahead of the OECD average. It can be seen from figure 4.5 that Ireland has dropped one position to 10th place. Belgium moves up 12 rankings to 5th place in a basket that also saw Germany's position improve considerably. The reason behind Belgium's significant improvement was the incumbent's introduction of a new tariff scheme starting on the 1st October. The incumbent reduced the cost of calling neighbouring countries and the U.S.A. to 3.5 Belgian Francs a minute (.086€).

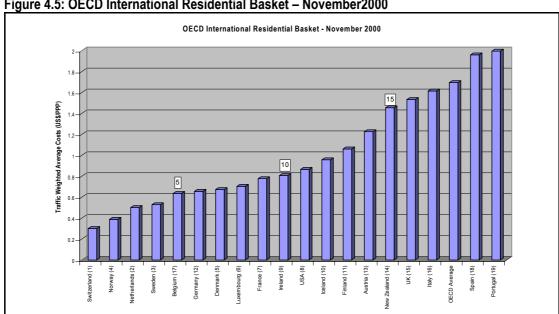


Figure 4.5: OECD International Residential Basket - November 2000

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

4.4 International Business Basket

Figure 4.6 sets out the average cost of international calls for business users. Like the national baskets, the international baskets have different weights for the business and the residential sectors. The business basket apportions 75% of the calls to peak rates, while the residential basket apportions only 25% to peak rates. As can be seen from the graph below, Ireland has dropped one position to move to 10th place. This basket sees a lot of movement with both Germany and Belgium making significant improvements. Ireland remains ahead of the UK and the OECD average again in this basket.

²⁴ The PSTN International Baskets are now calculated using the revised OECD methodology. The output of the traffic-weighted basket presents average call costs of 3-minute peak calls and 5 minutes off-peak calls from one country to all other countries in the basket. The residential basket includes VAT, and takes 25% of the call cost from peak charges, and 75% from off peak charges.

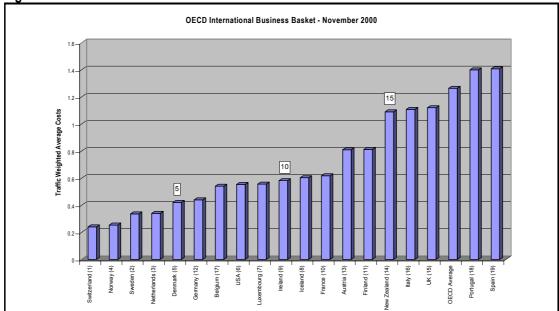


Figure 4.6: OECD International Business Basket -November 2000.

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

4.5 National Leased Lines²⁵

Using the OECD methodology, figure 4.7 compares the cost of various countries national leased line tariffs as at September 2000. Since our last review Ireland has retained its position in 7th place, however it now lies three positions ahead of the UK. There have been no major developments in this basket with the Scandinavian countries still leading the way.

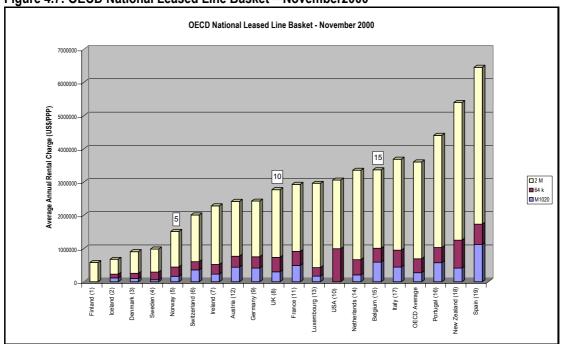


Figure 4.7: OECD National Leased Line Basket – November 2000

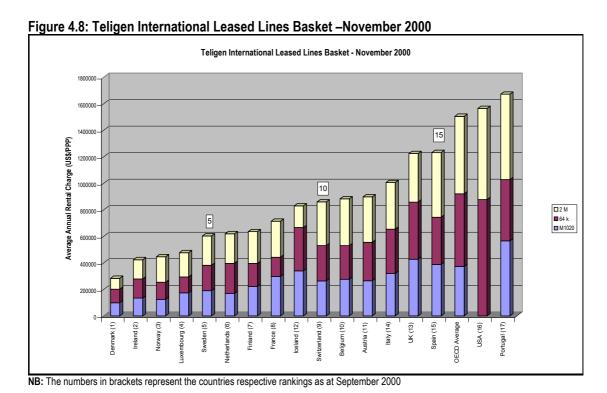
NB: The numbers in brackets represent the countries respective rankings as at September 2000

_

²⁵ The 'National Leased Line Basket' is based on 100 circuits distributed over 6 distances from 2 to 500 km. Results exclude VAT.

4.6 International Leased Lines²⁶

Using a methodology developed by Teligen, figure 4.8 below sets out the various costs of international leased line tariffs as at November 2000. Irelands strongest performance has been in this basket, retaining the 2nd position that it held in September. Ireland has improved 9 positions in this basket since February 2000, and is now firmly placed in the upper decile of this market.



²⁶ 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.

4.7 Residential Mobile Basket²⁷

This basket covers GSM or DCS tariffs. Both reflect post-paid tariffs available from the incumbent fixed network operator's mobile subsidiary. The "Residential Mobile Basket" sets out the average costs of residential mobile tariffs. In 18th position Ireland lies 5 places behind the OECD average and 11 places. Irelands position in this basket is expected to improve with Meteor entering the market early in 2001.

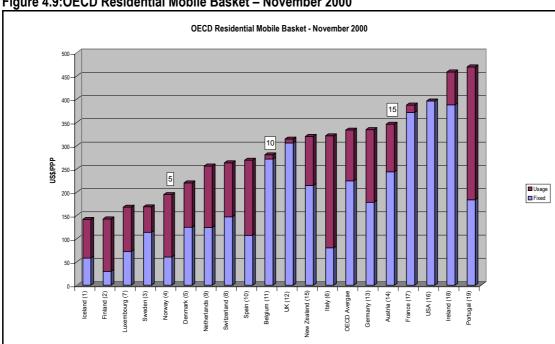


Figure 4.9:OECD Residential Mobile Basket - November 2000

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

4.8 Business Mobile Basket²⁸

The "Business Mobile Basket" sets out the average costs of business mobile tariffs. Ireland has dropped one position since the last quarter and moves into 19th place, 6 places behind the OECD average and 11 places behind the UK. There has been a lot of movement in this basket since the last quarter (See Figure 4.10 overleaf). Luxembourg and France gained and 9 places respectively, which sees Luxembourg move into first place and France into 10th place.

²⁷ The OECD Residential 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 setup and minimum charges are included.

²⁸ 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

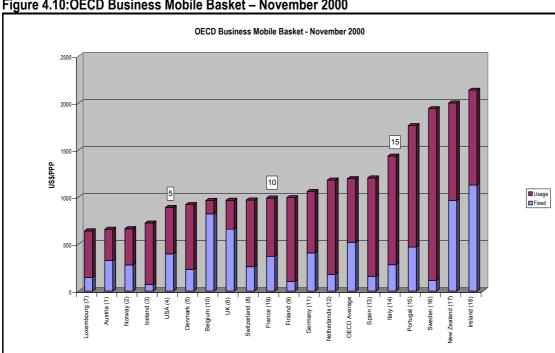


Figure 4.10:OECD Business Mobile Basket - November 2000

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

Appendix 1 – List of Licensees

GENERAL LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
AUCS Communications Services (Ireland) Ltd formerly known as AT&T Unisource	✓ []	×□	~ [×□	VPNs, International Call Centre Solutions.
Aurora Telecom Ltd	Χ□	×	×	×	×
Budget Telecommunications Ltd	∨ □	v []	→ □	~ []	Indirect Access (National/International/Mobile) Services. Number Translations Services.
Cable & Wireless Services Ltd	> []	v []	→ □	Χ□	Customer Premises Equipment Frame Relay & ATM Freephone, Direct & Indirect Voice
Cablelink (Acquired by ntl:)	~ []	> [~ []	×	Cable TV, voice, data and internet services.
Cable Management Ireland Ltd	~ []	×	→ □	×	Cable TV & telephony services
Carrier 1 AG	Χ□	Χ□	×	×	Χ□
Cignal Global Telecommunications Ireland Ltd	Χ□	Χ□	×	×	x □
Colt Telecom	ΧŪ	Χ□	×	×	X □
Concert Global Networks Ltd.	ΧŪ	Χ□	Χū	×	X □
eircom	~ []	~ []	✓ []	×	Global voice, data and internet services provider.
Eircell	✓ []	v [→ □	×	Mobile Operator
Esat Telecommunications Ltd	✓ []	~ []	✓ []	×	Global voice, data and internet services provider.
Esat Digifone	~ []	v []	✓ [×	Mobile Operator
Esat Inland Ltd. (transferred from Post GEM)	✓ []	Χ□	✓ [×	Internet Service Provider
Esat Net	✓ []	Χ□	→ □	×	Internet Service Provider
Formus	~ _	v	→ □	×	Wireless local loop voice & data services.
GTS Business Services (Ireland) Ltd	~ []	~ []	✓ []	✓ []	Carrier and access services; Internet services; callcards.
IDT Europe BV Lts Liability Coolder	Χ□	Χ□	x □	×	X □
Interoute Ireland Ltd	∨ □	∀ □	→ □	→ □	Residential & Business CPS Carrier Access. Prepaid Accounts and cards.

GENERAL LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
ITG Group (IRL) Ltd.	~ []	Χ□	~ [Χ□	EPOS Equipment Payphones CPS on Voice Land-Line Traffic
IXC Communications Services Europe Ltd.	×	Χ□	Χ□	×	Χ□
LCN-Ireland, L.L.C.	×	X	×	×	Χ□
LDMI Telecommunications of Ireland (previously known as Vianvi Ltd)	×	Χ□	Χū	×	×
Mastercall International Ltd	Χ□	Χ□	×	×	x □
WorldCom	→ □	✓ []	~ [X □	Int'l frame relay, int'l freefone service into Ireland, Nat. & Int'l VPNs.
Meridian Communications Ltd. (formerly known as ACCess Telecom)	~ []	~ []	×	✓ []	Resale of mobile telephony services
NTL (UK) Group, Inc.	✓ 🗆	Χ□	~ [×	Leased Lines and Broadcasting Transmission Services.
Ocean Communications Ltd	✓ 🗆	~ []	→ □	×	Complete voice, data and internet
PrimeTEC UK Ltd	×	Χ□	×	×	service provider. x □
Primus Telecommunications Ltd	×	Χ□	×	×	Χū
Princes Holdings Ltd (Chorus)	~ []	~ []	→ □	×	Cable TV & telephony services
RSL Communications (Ireland) Ltd	Χ□	Χ□	×□	x _□	X □
S.M. Communications (T/A Worldlink)	~ []	v []	×	✓ []	Prepaid Services
Smart Telecom	X	X	×	×	x □
Startec Global Communications UK Ltd.	×	Χ□	×	×	Χ□
Stentor Communications Ltd	~ []	∨ □	~ []	✓ []	Call centre and VPN solutions Callcards
Suir Nore Relays Ltd	✓ 🗆	Χ□	~ []	×	Cable TV and telephony services□
Swiftcall Centre	∨ □	v []	X	~ []	Indirect Access & CPS Telephony Internet & Callcard Services Call Centre Services
Tele2 Telecommunications Services Ltd.	×	Χ□	Χ□	×	x □
Teleglobe Ireland Ltd	×	Χ□	X.	×	x □
Transaction Network Services Limited	→ □	Χ□	×	X []	Dial-up access for point of sales.

GENERAL LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
VarTec Telecom (UK) Ltd.	×	×	Χ□	Χ□	X □
Viatel (I) Ltd.	×	×	Χ□	×	Χ□
WTI Ireland Ltd.	×	×	Χ□	×	X []
Yac.com Ltd.	×□	×□	Χ□	Χ□	×

BASIC LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
Alord Holdings Ltd (T/a Switchcom) *	✓ []	✔ 🗆	×	~ []	Callcards Pre-paid/Post paid residential service.
AT&T Global Network Services Ireland Ltd.	✓ []	Χ□	'	×	Dial up and leased line services
Broad Band Communications Ltd.	Χ□	Χ□	×	×	X
Cargo Community Systems Ltd.	✓ []	Χ□	~ [×	e-commerce solutions
Casey CableVision Ltd.	✓ []	×	→ □	×	Cable TV Limited internet services
Conduit Enterprises Ltd	✓ []	×	~ []	×	Nat. & Int'l directory enquiry services
Energis (Switz.) AG formerly known as Unisource Carrier Services AG.	Χ□	×	×□	×	Χ□
EGN B.V.	✔ []	×	~ [×	Managed data systems & frame relay services for multinationals
Genesis Internet Service Provider Ltd.	Χ□	×□	×	×	X _□
Genuity International Inc. (formerly known as GTE Internetworking International Corporation)	Χ□	×□	×	×	×
Global Crossing Ireland Ltd.	✓ []	×	~ [×	Carriers' carrier
Global One Communications Ltd.	✓ []	×	→ □	×	ATM Switching
Hibercall Ltd. *	✓ []	> [×	~ []	Prepaid & Postpaid Services, Callcards
Indigo	→ □	×	→ □	×	Internet Service Provider
Iridium Communications Germany GmbH.*	Χ□	×	×	×	×
IXNET UK Ltd.	✓ []	Χ□	~ [Χ□	Limited service to banks.
Lake Communications System	✓ [×	~ [Χ□	ISDN, business solutions
MediaNet Ireland Ltd	✓ []	Χ□	→ □	×	Internet business solutions
Metromedia Fibre Network Ireland Ltd.	Χ□	Χ□	×	×	X
Next Telecom	Χ□	Χ□	×	×	×
Reuters Ltd T/A Reuters Connect Services.	~ []	X	→ □	×	Private wire services.
Rillbank Limited	v	→ □	×	✓ □	Commercial Post-paid services.
Savvis Europe B.V.	Χ□	×	×	×	×

[•] Licence surrendered to the ODTR, 7 August 2000.

BASIC LICENSEES	Operational	Voice Services	Infrastructural Network	Reseller	Other VAS
Sonic Telecom	Χ□	×	×	×	×
Société Internationale de Télécommunications Aéronautiques	✓ []	×	✓ []	×	Managed data network access services for the airline industry.
TCS (Ireland) Ltd. **	→ □	✓ []	×	×	Voice Telephony services via the Internet.
Tele Media International Ltd.	×	×	×	×	×□
Timas Ltd (T/A Galileo Ireland)	→ □	×	→ □	×	Frame relay service for travel agents
Torc Telecom. *	→ □	~ []	Χ□	~ []	Re-selling long distance domestic & international services; callcards.
Valuetel Ltd. *	~ []	✓ []	×	✔ []	Re-selling long distance domestic & international services; callcards.
Web-Sat Ltd.	→ □	×□	→ □	×□	Internet access via satellite; SMG news services.

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

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

Appendix II - IMS Survey

REPORT

PREPARED FOR: Office of the Director of Telecommunications Regulation

BY: Irish Marketing Surveys Limited

Introduction

This summary report reviews the findings of a survey conducted on behalf of the Office of the Director of Telecommunications Regulation by Irish Marketing Surveys.

This survey was conducted to establish usage of and attitudes to telecommunication suppliers amongst SME companies. 201 interviews were conducted amongst a nationally representative sample of SME companies in Ireland via our Computer Assisted Telephone Interviewing (CATI) unit between the 4th and 12th October 2000.

Summary of Findings

Use of Telecommunication Devices or Services

Over six in ten (62%) of the companies surveyed do not have any ISDN telephone lines and around nine in ten (88%) companies claim not to have leased lines.

Mobile phone usage is high with almost nine in ten (87%) companies owning at least one mobile phone. Multiple ownership is common - 20% have two, 13% have three and over a third (35%) have at least four. Only one in eight (13%) companies claim not to have any mobile phones.

Telecommunications Supplier

Eircom is currently the most widely used supplier for local, national and international telephone calls. 78% of companies currently use Eircom for their local landline calls, 71% for their national landline calls and 69% for their international landline calls. Eircom is followed at a distance by Esat Clear with 8% of companies stating they currently use Esat Clear for their local landline calls, 12% for their national landline calls and 12% for their international landline calls. Very low proportions of companies (i.e. 3% or under) use other suppliers.

Close to six in ten (59%) companies use Eircell as their supplier for mobile telephone calls, followed by Esat Digifone at 41%. Eircell and Esat Digifone naturally have the largest share of the mobile phone market amongst SME companies, with only 3% of companies claiming to use other suppliers.

Carrier Pre Selection

A significant proportion (89%) of companies say they are aware that they can now select an operator, other than Eircom, to carry their calls (Carrier Pre Selection).

When asked to name the operators who offer this service, spontaneous awareness is highest for Esat Clear (42%), followed by Eircom (26%), Ocean (23%), Worldcom (15%), Spirit (13%), Newtell-Newcell (13%) and ntl at 11%. Less than one in six (16%) companies say they cannot recall the names of any operators.

Satisfaction with Current Service Provider(s)

Installation/delivery times

Generally there is a high level of satisfaction with installation/delivery times. A quarter (25%) of companies say they are very satisfied with this aspect of service from their current supplier, whilst over half (55%) say they are satisfied. Amongst the small proportion (10%) expressing dissatisfaction, delays, technical problems/breakdowns and non-response from contact points are the main reasons mentioned for their dissatisfaction.

Response to faults/problems

Current service providers appear to be providing a good response to customer faults/problems with almost one in four (24%) companies saying they are very satisfied with regard to this service aspect and a further 52% say they are satisfied. Only a small proportion (12%) expressed dissatisfaction and their reasons for this dissatisfaction are delays, non-response, no follow-up and an overall poor service. A small number have experienced problems when dealing with two service providers.

Availability of services

Quite a large proportion of companies, over eight in ten (81%), are very satisfied/satisfied with the availability of services from their current service provider. A very small number have experienced problems getting through or the service requested was not available or not delivered.

Price of services

Customers are most dissatisfied when it comes to the issue of price. Close to one-third (31%) are dissatisfied with the price of services, believing them to be simply too expensive.

Reasons Why/Why Not Switch Supplier

Local Landline Telephone calls

Almost four in ten (37%) companies indicated they have switched their supplier of local landline telephone calls. The main reasons for doing so are cheaper calls (87%) and a smaller proportion (12%) were unhappy with the service received from their previous supplier.

National Landline Telephone Calls

A slightly higher number (41%) have switched supplier for their national landline telephone calls. Again, cost savings and a better service are the key drivers for the switch.

International Landline Telephone Calls

Around the same proportion (42%) of companies have switched supplier for their international landline telephone calls to avail of the cost reductions on offer from competitor companies.

Mobile Calls

Only around one in five (19%) companies have switched supplier for their mobile calls. Price, followed by better coverage/reception are the main reasons for the move. Amongst those who have not considered switching (72%), satisfaction with the level of service from their current provider is the main reason for staying loyal.

For the most part, companies that have switched supplier experienced very few problems and most say they have not encountered any difficulty when switching.

General Attitudes to Telecommunications

At the end of the survey, respondents were asked to what extent they agree or disagree with a number of statements relating to the telecommunications market. Almost eight in ten (78%) agree with the first of these statements "I believe there are savings to be gained by changing my telecommunications supplier". However, they are clearly not putting this into action, as loyalty is still much higher than defection. Two-thirds (66%) agree with the statement "When choosing a telecommunications supplier, I place more importance on the quality of service than the price" and yet price is a major source of existing dissatisfaction.

Not surprisingly, following deregulation in the Irish telecommunications market in recent years, 95% of companies agree with the statement "I believe the telecommunications market is more competitive than it was 12 months ago"

The arrival of new telecommunications suppliers has inevitably resulted in cost savings and consequently over eight in ten (85%) companies agree with the statement "The overall cost of telecommunications has decreased in the last 12 months."

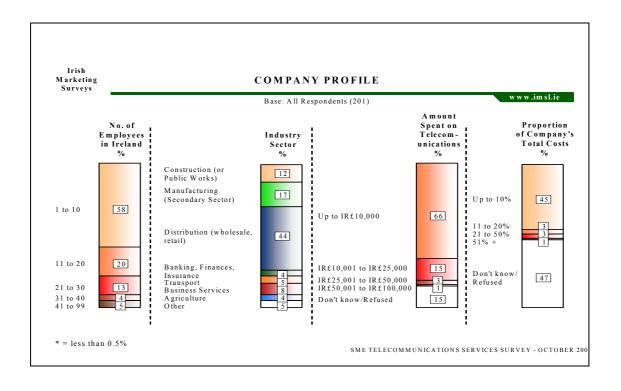
OFFICE OF THE DIRECTOR OF TELECOMMUNICATIONS REGULATION

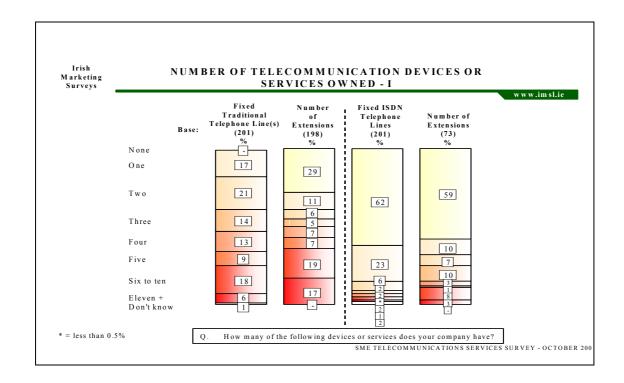
CHARTED SUMMARY OF FINDINGS

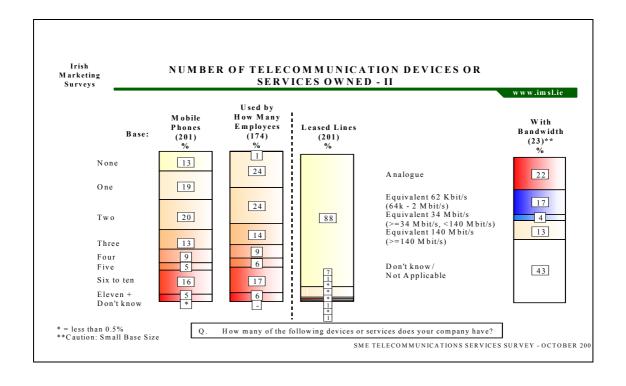
SME TELECOMMUNICATIONS SERVICES SURVEY

October 2000









Surveys		Base: All l	Respondents (201)		www.im
		Local Landline Telephone Calls %	National Landline Telephone Calls %	International Landline Telephone Calls %	Leased Lines %
	Eircom	78	71	69	8
	Esat Clear	8	12	12	2
	Ocean	3	3	3	-
	Spirit	2	3	3	-
	Switchcom	1	*	1	-
	ntl	1	1	1	*
	Other	12	14	14	2
	Don't know	-	*	1	-
	Not applicable - do not have leased lines	-	-	-	88

