

Irish Communications Market

Quarterly Key Data

March 2003

Document No:	03/29b
Date:	12 th March 2003

Contents

1	Overa	ll Market Data	1
	1.1.1	Overall Telecommunications Revenues	1
	1.1.2	Telecoms Sector as a % of GDP	1
	1.1.3	Number of licenses	1
	1.1.4	Employees	2
2	Data F	By Sector	2
_	Data		
	2.1	FIXED LINE	
	2.1.1	Fixed Line Revenue	
	2.1.2	OLO Market Share	
	2.1.3	Carrier Pre Selection	
	2.1.4	Telecom Access Paths	
	2.1.5	PSTN Lines	
	2.1.6	ISDN Access Channels	
	2.1.7	Mobile Subscribers	
	2.1.8	Retail Traffic	
	2.1.9	DSL	
	2.1.10	Cable Modems	
	2.1.11 2.1.12	Fixed Wireless Access	
	2.1.12	MOBILE	
	2.2.1	Irish Mobile Penetration Rate	
	2.2.2	EU Penetration Rates	
	2.2.3	Subscribers	
	2.2.4	Market Shares	
	2.2.5	SMS	
	2.2.6	ARPU	9
	2.3	INTERNET	10
	2.3.1	Ireland's Internet Penetration Rate	10
	2.3.2	EU Internet Penetration	
	2.3.3	Average Internet Usage	
	2.3.4	Methods of access to the Internet at home	
	2.3.5	Frequency of using the Internet at home	
	2.3.6	On-line Purchases	
	2.3.7	Internet Minutes	
	2.4	Cable/MMDS & Satellite	
	2.4.1 2.4.2	Cable/MMDS SubscribersDigital Subscribers	
	2.4.2	Households Passed	
	2.4.3	TV Distribution in Ireland	
	2.4.5	Cable/MMDS Revenues	
3	Tariff	Data	14
	3.1	Overview	15
	3.1.1	PSTN	15
	3.1.2	Leased Line	15
	3.2	PSTN BASKETS	
	3.2.1	National Residential Basket	16
	3.2.2	National Business Basket	
	3.2.3	International Residential Basket	
	3.2.4	International Business Basket	
	3.3	LEASED LINE BASKETS	
	3.3.1	National Leased Lines	
	3.3.2	International Leased Lines	
	3.4	MOBILE BASKETS	
	3.4.1 3.4.2	Medium User Post Paid Mobile Basket	
	3.4.2 3.4.3	High User Post Paid Mobile Basket	
	3.4.4	Pre Paid Mobile Basket	
Αį	opendix -	Licensees	21

LEGAL DISCLAIMER

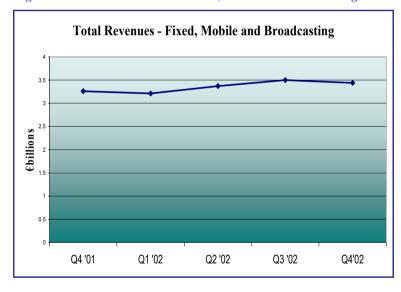
The information and statistics contained within this document are derived from a variety of sources. While all reasonable care has been taken in preparing it, no responsibility whatsoever is accepted by the Commission for Communications Regulation, her lawful servants or agents for any loss or damage,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

1 Overall Market Data

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

1.1.1 Overall Telecommunications Revenues

Figure 1.1.1 Total Revenues - Fixed, Mobile & Broadcasting



- Total revenues for fixed, mobile & broadcasting markets now stands at an estimated €3.44 billion per annum on an annualised basis.
 - > Decrease of approximately 2% since last quarter.

➤ Increase of approximately 5% since December 2001.

1.1.2Telecoms Sector as a % of GDP

- Telecoms sector is estimated to account for approximately 3% of Irish GDP (2001)¹.
 - > Remains the same as last quarter.
 - ➤ Decrease of 0.17% since last year

1.1.3 Number of licenses

- To date 48 General and 44 Basic licences² are in issue in the Irish market.
- There are 22 operators providing services under General licences (March 2002; 19) and 17 under Basic licences (March 2002; 19)³

¹ Figure was calculated using GDP at market price (2001) – ESRI Quarterly Economic Commentary, Winter 2002.

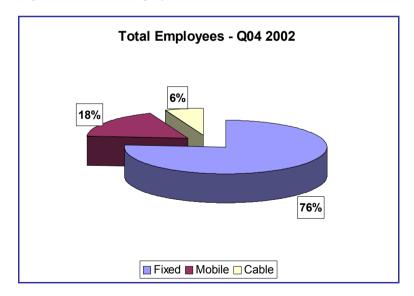
² Basic licences were awarded to Amocom Technologies Ltd, Digiweb Ltd, eNasc Eireann Teoranta, & Irish Wisp Consultants Ltd. General licences were issued to Opera Telecom Ltd & Talkshop Ltd.

³ These figures are based on a number of operators that are operational rather than on the number of operational licences. For example eircom have both a general and a basic licence (Indigo) and have been included in the general category only. The figures reported last quarter were based on the number of operational licences. VarTec Telecom and Infonet Broadband Solutions commenced operations this quarter.

1.1.4 Employees

- The number employed in the telecommunications sector is approximately 14,900. This decrease is in line with European trends.
 - > Decrease of 3% since last quarter
 - ➤ Decrease of 11% since last year
- The fixed, mobile & broadcasting markets account for approximately 76%, 18% and 6% of the total figure respectively, consistent with last quarter and last year.

Figure 1.1.2 Total Employees



2 Data By Sector

2.1 Fixed Line

2.1.1 Fixed Line Revenue

- Total fixed line revenue⁴ approximately €514 million
 - > Decrease of approximately 1% since last quarter
 - Annualised fixed line revenue figure accounts for 60% of total telecoms revenue

2.1.20LO Market Share

- OLO market share is approximately 20%
 - ➤ Decrease of 1% since last quarter
 - ➤ Decrease of 1% since last year

Figure 2.1.1 OLO Market Share



Source: ComReg Quarterly Review Questionnaire

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

2.1.3 Carrier Pre Selection

Figure 2.1.2 Carrier Pre Selection



- Approximately 176,000 CPS lines⁵
 - ➤ Increase of approximately 9% since last quarter.
 - > Represents approximately 11% of total PSTN lines.
- Of the total number of CPS lines, 98%, 1% and 1% are apportioned to all calls, national & international calls, and international calls only respectively.
- More recent indications suggest some pressure on OLO CPS numbers.

2.1.4Telecom Access Paths

• 4.97 million telecom access paths

2.1.5PSTN Lines

- Total of 1.6 million lines
 - > Remained constant since last quarter
 - > Accounts for 32% of total access paths

2.1.6ISDN Access Channels

- Approximately 375,000 ISDN access channels
 - ➤ Increase of 30% since last year
 - Increase of 9% since last quarter
 - > Accounts for 7% of total access paths
- The proportion of primary, fractional & basic rate ISDN is 44%, 6% and 51% respectively of the total number of ISDN access channels.

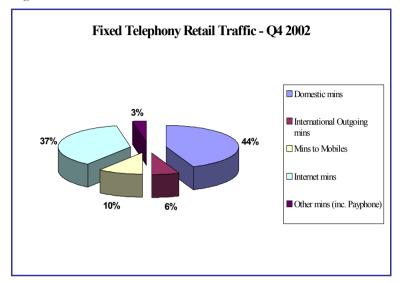
2.1.7 Mobile Subscribers

- 3 million mobile subscribers
- Account for approximately 60% of total access paths

⁵ Both business & residential

2.1.8Retail Traffic

Figure 2.1.3 Retail Traffic



- Retail traffic has decreased overall by approximately 1% since last quarter.
 - > Total minutes remained static in the same quarter last year.
 - Domestic and International minutes have increased since last quarter.
- Domestic minutes retain the highest proportion of total retail traffic, followed by internet minutes.

OLO market share based on volumes⁶ is 14%

2.1.9DSL

- Approximately 3,300⁷ DSL lines have been ordered, of which 20% are non-incumbent lines
 - ➤ Increase of approx 74% since last quarter

2.1.10 Cable Modems

- Approximately 2,300 cable modems supplied by Ntl, Chorus and Casey CableVision (Dungarvan).
 - ➤ Increase of approx 13% since last quarter

2.1.11 Fixed Wireless Access

- Approximately 5,000 residential and business subscribers
 - A decrease of approx 500 since last quarter

⁶ Includes domestic, international, mobile, internet, payphone & other mins

⁷ This figure includes the incumbent and OLO lines and is based on the number of orders.

2.1.12 Leased Lines

The following table sets out the rolling three month average delivery time for circuits delivered by *eircom* to OLOs⁸.

Table 2.1.1 Rolling Three Month Average Delivery Time for Leased Line Circuits Ordered by OLOs (Working Days)

	November 2002	December 2002
All Leased Lines	20	19
Of Which:		
Sub 2Mbit Lines	20	19
2Mbit Lines	23	22

- The rolling three month average delivery time for leased line circuits ordered by OLOs for October 2002 was between 22 and 31 days.
- Since October this figure has reduced from 22 to 19 days for Sub 2Mbit Lines, from 31 to 22 days for 2 Mbit Lines⁹ with a fall in the average delivery time for all Leased Lines from 22 to 19 days¹⁰.

⁸ The rolling three month average for January 2003 was not available in time for this quarter.

⁹ The large drop in the figure for 2Mbit Lines was due in part to one extremely late non-standard order in August causing an unusually large figure for the October three month rolling average.

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

2.2 Mobile

2.2.1 Irish Mobile Penetration Rate

Figure 2.2.1 Irish Mobile Penetration Rate

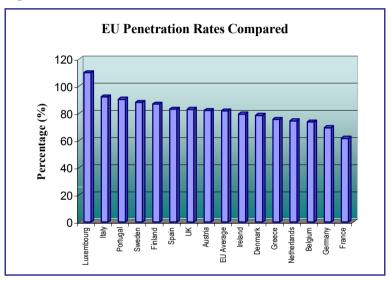


Source: Baskerville and ComReg Estimates

- Irish mobile penetration rate now stands at 79%.
 - ➤ Increase of 2% since last quarter
 - ➤ Increase of 2% in the last 12 months

2.2.2EU Penetration Rates

Figure 2.2.2 EU Penetration Rates



Source: Baskerville

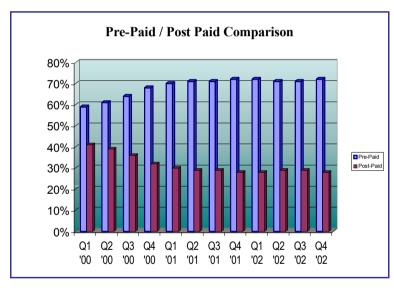
• Ireland has the 9th highest penetration rate in the EU¹¹, one place behind the EU average and two places behind the UK.

¹¹ Although Ireland lies behind the EU average it is difficult to ascertain how recent the population figures for the various EU countries have been updated. Ireland's penetration figure is reflective of the CSO census population figure for 2002. Using the previous Irish population figure used the mobile penetration rate would now be at 82%, equivalent to the EU average and one place behind the UK.

2.2.3Subscribers

- Approximately 3 million mobile subscribers, at the end of December 2002.
 - ➤ Increasing from approximately 2.95 million at the end of December 2001

Figure 2.2.3 Pre-Paid / Post Paid Comparison

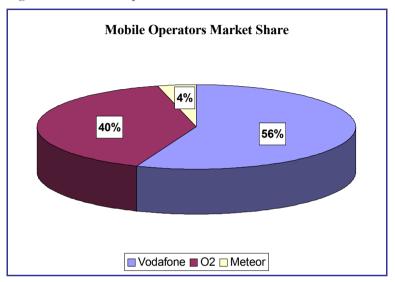


Source: ComReg Quarterly Review Questionnaires

• Pre-paid and Post-paid subscribers account for 72% and 28% of the overall mobile subscribers respectively.

2.2.4 Market Shares

Figure 2.2.4 Mobile Operators Market Share 12



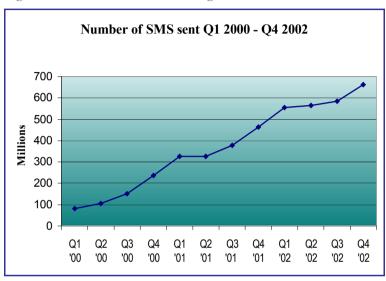
Source: ComReg Quarterly Review Questionnaire

- Vodafone 56%, a decrease of 1% since our last review
- $0_2 40\%$, remaining the same since our last review
- Meteor 4%, an increase of 1% since our last review

¹² Market share based on the number of subscribers

2.2.5 SMS

Figure 2.2.5 Number of SMS Messages sent

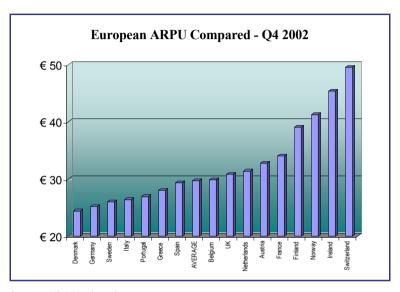


Source: ComReg Quarterly Review Questionnaire

- Approximately 660 million messages sent during the quarter.
 - > 72 SMS messages sent on average per month, increase of 13% on the previous quarter.
 - ➤ 43% increase in the number of messages sent in 12 months.

2.2.6 ARPU

Figure 2.2.6 European ARPU Compared



Source: The Yankee Group

Irish Mobile Operator's ARPU is estimated at €45 per month¹³ up from €44 last quarter while the EU average is €30¹⁴.

Average revenue generated by each user per month over the 12-month period to end-December 2002. Country ARPU is the weighted average (by user market share) of published and estimated individual operator ARPU. In 2001 and 2002, certain operators restated ARPU figures to reflect new user definitions and the elimination of inactive prepaid customers. These changes have now been incorporated, resulting in comparatively higher ARPU in certain countries.

¹⁴ Regional average is also a weighted average based on the 2002 midterm base for each country.

2.3 Internet

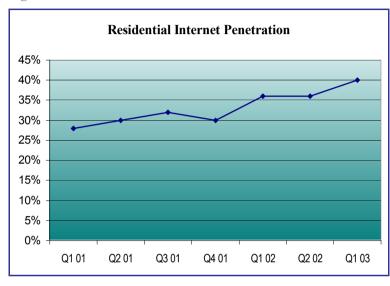
ComReg commissioned *Amárach Consulting* to carry out Internet research among a nationally representative sample of 1,000 adults aged $15 - 74^{15}$. Of those surveyed 83% have a fixed line at home. Currently, the predominant method of accessing the Internet at home is by a fixed line, although there are other access technologies such as cable modems and wireless connections. The results of *Amárach's* research will refer to those with a fixed line unless otherwise stated.

Residential Internet penetration stands at 40% and has grown over the last year by 4%. It should be noted however that by including those who do not have a fixed line the Internet penetration figure would be 34% of households in Ireland.

Amárach's research will be carried out quarterly and included in our key data report. The results of the survey are referred to throughout this section.

2.3.1 Ireland's Internet Penetration Rate

Figure 2.3.1 Ireland's Internet Penetration Rate



- Residential Internet penetration is estimated at 40%¹⁶
- An increase of 4% from the same period last year.

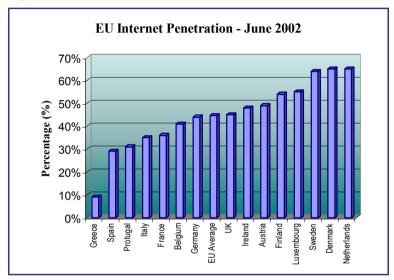
 $^{^{15}}$ Margin of error of +/- 3.4%

¹⁶ Amárach carried out face to face research of 1,000 adults aged 15 – 74 years during January / February 2003. The Internet penetration figure is nationally representative of the adult population with a fixed line.

2.3.2EU Internet Penetration

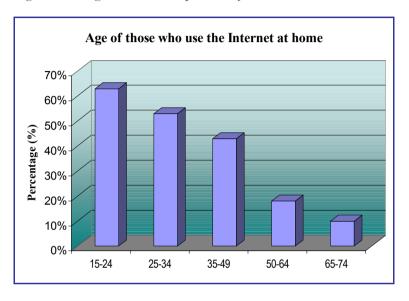
According to the results of the European Commission's Flash Eurobarometer¹⁷ report, Ireland was 7th in terms of Internet penetration rate in the EU at June 2002.

Figure 2.3.2 EU Internet Penetration



2.3.3Average Internet Usage

Figure 2.3.3 Age of those who personally use the Internet at home



• Usage is highest amongst 15 – 24 year olds (63%), 25 -34 year olds (53%) and 35 – 49 year olds (43%)

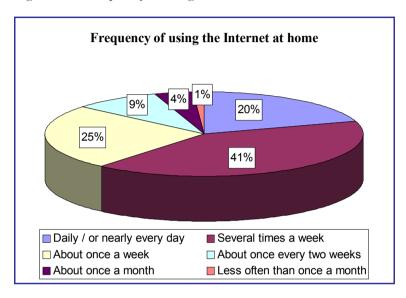
2.3.4 Methods of access to the Internet at home

• PSTN is the predominant form of home Internet access (86%) followed by ISDN (8%)

¹⁷ Millward Brown IMS were commissioned by the European Commission to carry out the research in Ireland for the EU benchmarking report. The sample sizes in each country amounted to 2,000 respondents. Each sample is representative of the continental population aged 15 and over, interviewed by telephone. A weighting factor is applied to the national results in order to compute a marginal total where each country contributes to this total result in terms of its total population.

2.3.5Frequency of using the Internet at home

Figure 2.3.4 Frequency of using the Internet at home



- Of those who personally use the internet at home, one in five uses it daily or almost every day, while a further two in five use it several times a week.
- On average those who personally use the Internet at home estimate that they spend 4 hours 16 minutes on line in a typical week.

2.3.60n-line Purchases

- 40% of used the Internet to purchase a product or service in the last three months.
- A 9% increase on the same period last year.
- The most common products or services purchased on the Internet in the last three months were airline tickets (67%), concert tickets (23%) and books (14%).

2.3.7Internet Minutes

• Internet minutes account for 37% of all fixed retail traffic

2.4 Cable/MMDS & Satellite

2.4.1 Cable/MMDS Subscribers

- Approximately 552,000 cable/MMDS subscribers to basic television services in Ireland¹⁸
 - > Decrease of approximately 1.5% since last quarter

2.4.2 Digital Subscribers

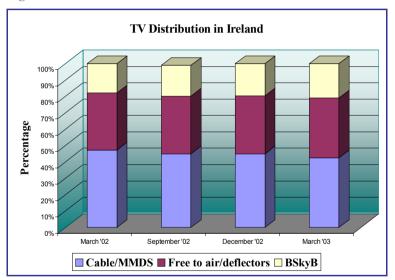
- Approximately 12% of cable/MMDS subscribers have upgraded to digital
 - > A real increase of 3 percentage points since last quarter
- 272,000 subscribers to BSkyB¹⁹
 - ➤ Increase of 7% since last quarter
- Approximately 337,000 cable/MMDS and satellite digital subscribers
 - Represents approximately 26% of all households with a television²⁰

2.4.3 Households Passed

- Over 1 million households passed
 - ➤ Approximately 64% are passed for digital services²¹

2.4.4TV Distribution in Ireland

Figure 2.4.1 TV Distribution in Ireland



2.4.5 Cable/MMDS Revenues

• Total cable/MMDS revenues have decreased by 1% since last quarter.

¹⁸ Figure of 585,000 reported last quarter was inaccurate due to a further element of double counting in operator reporting systems. The true figure for Q3 2002 was 560,000. All remaining figures in the section are calculated using the true figures for Q3/Q4.

¹⁹ BSkyB interim report, 31st December 2002

 $^{^{20}}$ Figure is based on CSO estimate of 1.3 million households with a television

²¹ This figure has fallen due to a large increase in the total number of households passed.

3 Tariff Data

This section compares movements in incumbents' tariffs for a range of telecommunication services. The tariff comparisons, generated from the pricing of a number of baskets of telecom services, now rank Ireland's position against all other Member States in relation to telecom tariffs²². It should be noted that competing operators sometimes offer cheaper tariffs and this would also be true in the other countries surveyed. The tariff comparison also reflects only one tariff option per incumbent operator and by definition is not indicative of tariff levels available in other tariff options, which may be offered by operators.

The baskets, which are constructed by Teligen using an OECD approved methodology, provide a "snapshot" of Ireland's position vis-à-vis the other Member States 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
- Pre-paid and post paid mobile baskets

Mobile Baskets

In the December Quarterly Review, the mobile tariff baskets were changed due to revisions of the methodology that were agreed in the OECD/Teligen mobile basket workshop in October 2001. To reiterate, there are three new baskets: low user, medium user and high user. Unlike the old mobile baskets, the usage profile of each basket now includes a number of SMS messages per month and is based on the operator with the lowest available tariff in each country²³.

While still using baskets constructed by Teligen using an OECD approved methodology, for the purpose of our analysis going forward only comparisons between the 15 Member States will be examined. As the removal of non-EU15 countries would result in an improvement in Ireland's position for nearly all fixed baskets (the mobile baskets have already previously been based on the EU15), all time series aspects of graphs have been revised to reflect positional changes relative to the EU15 only.

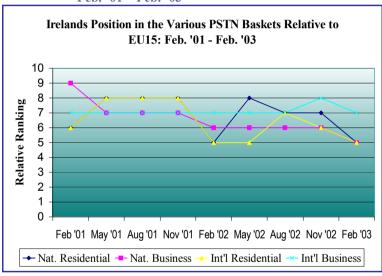
²³ Previously this was based on tariffs available from the incumbent mobile operator.

3.1 Overview

3.1.1 PSTN

• Figure 3.1.1 has been revised to show movement in Ireland's position relative to the EU15 in all PSTN baskets over the past two years. Ireland's position has improved in all of these baskets since last quarter.

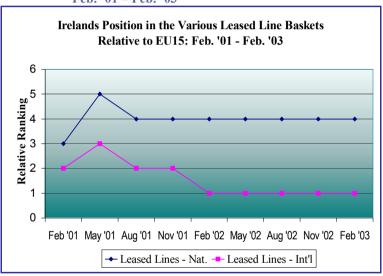
Figure 3.1.1: Ireland's Relative Position for Various PSTN baskets: Feb. '01 – Feb. '03



3.1.2Leased Line

• Figure 3.1.2 below has been revised to show movement in Ireland's position relative to the EU15 in the leased line baskets over the past two years. Ireland's position in both baskets remains unchanged since last quarter.

Figure 3.1.2 Irelands Relative Position in the Leased Line Baskets: Feb. '01 – Feb. '03

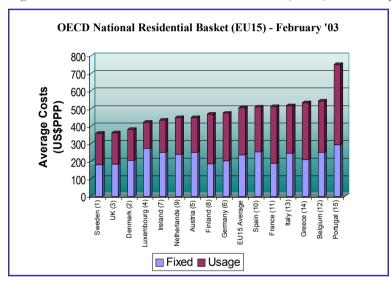


3.2 PSTN Baskets

3.2.1 National Residential Basket

• It appears that Ireland has become more competitive in this basket since last quarter, moving into 5th place from 7th after passing Germany and Austria and is five positions ahead of the EU15 average.

Figure 3.2.1: OECD National Residential Basket (EU15) – February 2003

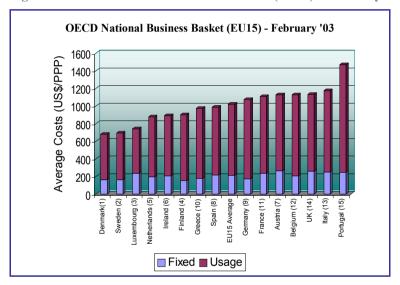


NB: The numbers in brackets represent each Member States respective rankings as at Dec. 2002.

3.2.2 National Business Basket

• Ireland has moved into 5th place from 6th after passing Finland and is four positions ahead of the EU15 average.

Figure 3.2.2: OECD National Business Basket (EU15) – February 2003

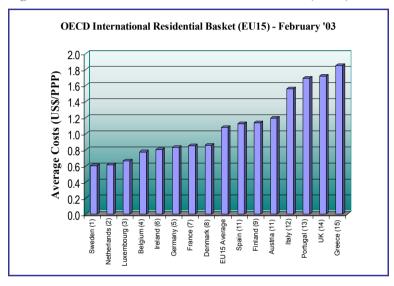


NB: The numbers in brackets represent each Member States respective rankings as at Dec. 2002

3.2.3 International Residential Basket

• Ireland has moved into 5th place from 6th after passing Germany and is four positions ahead of the EU15 average.

Figure 3.2.3 OECD International Residential Basket (EU15) – February 2003

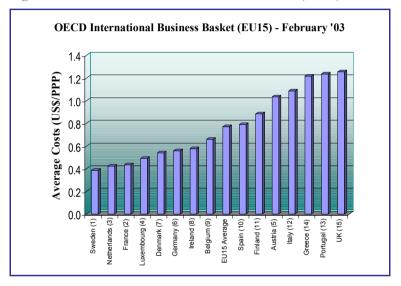


NB: The numbers in brackets represent each Member States respective rankings as at Dec. 2002

3.2.4 International Business Basket

• Ireland has moved into 7th place from 8th after passing Austria and is two positions ahead of the EU15 average.

Figure 3.2.4: OECD International Business Basket (EU15) – February 2003



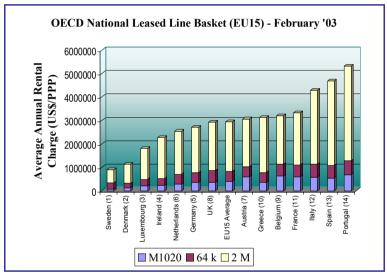
NB: The numbers in brackets represent each Member States respective rankings as at Dec. 2002

3.3 Leased Line Baskets

3.3.1 National Leased Lines

 Ireland remains in 4th place and is four positions ahead of the EU15 average²⁴.

Figure 3.3.1 OECD National Leased Line Basket (EU15) – February 2003

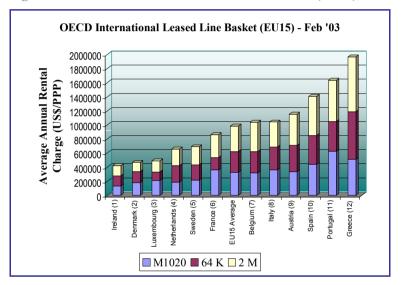


NB: Data for Finland is unavailable. The numbers in brackets represent each Member States respective rankings as at Dec. 2002

3.3.2International Leased Lines

Ireland remains in 1st position²⁵.

Figure 3.3.2 OECD International Leased Line Basket (EU15) – February 2003



NB: Data for Germany, Finland and UK is unavailable. The numbers in brackets represent each Member States respective rankings as at Dec. 2002

²⁴ The "National Leased Line Basket" is based on 100 circuits distributed over 6 distances from 2 to 500 km. Results exclude Vat.

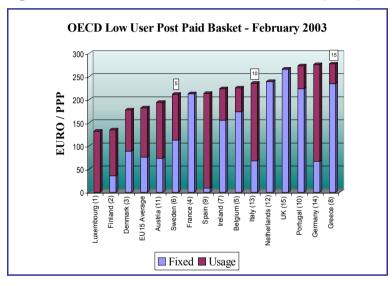
²⁵ The prices for these circuits are devised from the weighted average of half-circuits to all other OECD countries, using the traffic volume weighting method proposed by Teligen. The UK prices for international digital leased lines have been removed – they are not available at present as they are only priced on a case-by-case basis.

3.4 Mobile Baskets

3.4.1 Low User Post Paid Mobile Basket

• Ireland lies in 8th position, down one place form last quarter and five places below the average.

Figure 3.4.1 OECD Low User Post Paid Mobile Basket (EU15) – Feb'03

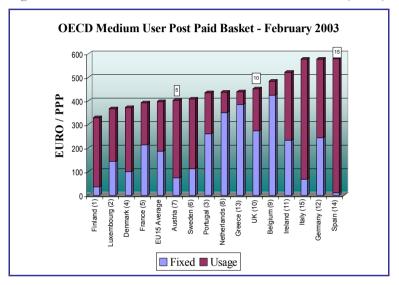


NB: The numbers in brackets represent the countries respective rankings as at Dec. 2002

3.4.2 Medium User Post Paid Mobile Basket

• Ireland lies in 12th position, eight places below the average and down one place since last quarter.

Figure 3.4.2 OECD Medium User Post Paid Mobile Basket (EU15) - Feb '02

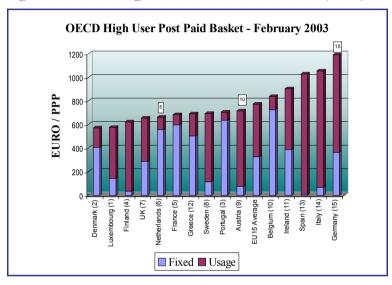


NB: The numbers in brackets represent the countries respective rankings as at Dec. 2002

3.4.3 High User Post Paid Mobile Basket

• Ireland lies in 12th position in the high user post paid mobile basket. This is down one place since last quarter.

Figure 3.4.3 OECD High User Post Paid Mobile Basket (EU15) -Feb '03

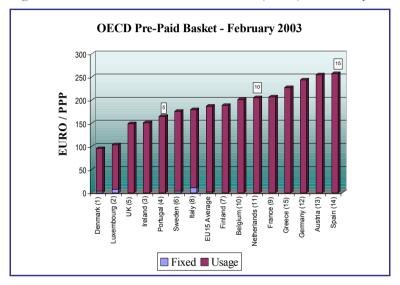


NB: The numbers in brackets represent the countries respective rankings as at Dec. 2002

3.4.4 Pre Paid Mobile Basket²⁶

• Ireland lies in 4th position for the pre-paid mobile basket, down one place since the last quarter.

Figure 3.4.4 OECD Pre Paid Mobile Basket (EU15) – February '03



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

²⁶ The OECD has found that there is little difference between the average pre-paid usage and low-user post-paid usage. This pre-paid basket thus refers to the average pre-paid user and is based on low user post-paid usage.

Appendix - Licensees

GENERAL LICENSEES

FIXED OPERATORS27

Licensee	Operational	4		
		to QR		
360 Atlantic	No	No		
Aurora Telecom Ltd.	YES	YES		
Alphyra (previously known as ITG Carrier Services)	YES	YES		
BT (Concert) Global Networks Ltd.	NO	NO		
Budget Telecommunications Ltd.	YES	YES		
Cable & Wireless Services (Ireland) Ltd.	YES	YES		
Colt Telecom	YES	YES		
Conduit Enterprises Ltd.	YES	YES		
Dome Telecom Ltd.	NO	NO		
<u>eircom</u>	YES	YES		
<u>EsatBT</u>	YES	YES		
Esat Net	YES	YES		
Global Crossing Ireland Ltd.	YES	YES		
GTS Business Services (Ireland) Ltd.	YES	YES		
IDT Europe BV Ltd Liability Cooler	NO	YES		
Infonet Broadband Services Corporation (licence transferred from AUCS Communications Services Ireland Ltd.)	NO	NO		
Interoute Ireland Ltd.	NO	NO		
IXC Communications Services Europe Ltd.	NO	NO		
LCN-Ireland, L.L.C.	NO	NO		
LDMI Telecommunications of Ireland	NO	YES		
Mastercall International Ltd.	NO	NO		
<u>WorldCom</u>	YES	YES		
Meridian Communications Ltd.	NO	NO		
Ocean Communications Ltd.	YES	YES		
PrimeTec UK Ltd.	NO	NO		
Primus Telecommunications Ltd.	NO	NO		
RSL Communications (Ireland) Ltd.	NO	NO		
<u>Sigma</u>	NO	NO		
SM Communications	YES	YES		
Smart Telecom	YES	YES		
Startec Global Communications UK Ltd.	NO	NO		
Nevada tele.com	YES	YES		

 $^{^{}m 27}$ Fixed line operators who hold a general telecommunications licence

Swiftcall Centre	YES	YES
TCSI Ltd.	NO	NO
Tele2 Telecommunications Services Ltd.	NO	YES
Teleglobe Ireland Ltd.	NO	NO
<u>Transaction Network Services Ltd.</u>	YES	YES
VarTec Telecom (UK) Ltd.	NO	YES
Viatel (I) Ltd.	NO	NO
Yac Ltd.	NO	NO

MOBILE OPERATORS

Licensee	Operational	Responded to QR
Meteor Mobile Communications	YES	YES
Hutchison Whampoa	NO	NO
O2 Communications Ireland Ltd.	YES	YES
Vodafone Ireland Ltd.	YES	YES

CABLE OPERATORS²⁸

Licensee	Operational	Responded to QR
<u>Chorus</u>	YES	YES
NTL Communications (Ireland) Ltd.	YES	YES

 $^{^{28}}$ Cable operators who hold a general telecommunications licence

BASIC LICENCES

FIXED OPERATORS²⁹

Alord Holdings Ltd. AT & T Global Network Services Ireland Ltd. Axis Communications Broadband Partners (Ireland Ltd.) Broadband Communications Ltd. Broighter Networks Ltd. Cargo Community Systems Ltd. Cinergi Telecom Ltd. (licence transferred from Hibercall Ltd. 14/11/02) Crossan Cable EGN B.V. ESB Telecoms Ltd. European Access Providers Ltd. Flag Telecom Genesis Internet Service Provider Ltd. Genuity International Inc. Genuity Internations Ltd. (licence transferred from Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO NO IDirect Irish Broadband Internet Services B.V. Kokomo Telecom Ltd. Kokomo Telecom Ltd. Kokomo Telecom Ltd. Kokomo Telecom Ltd. NO NO NO NO NO NO NO NO NO N			
Alord Holdings Ltd. AT & T Global Network Services Ireland Ltd. Axis Communications Broadband Partners (Ireland Ltd.) Broadband Communications Ltd. Broighter Networks Ltd. Cargo Community Systems Ltd. Cinergi Telecom Ltd. (Icence transferred from Hibercall Ltd. 14/11/02) Crossan Cable EGN B.V. ESB Telecoms Ltd. European Access Providers Ltd. NO Readian Dystems Ltd. (Icence transferred from NO Ro Genuity International Inc. Genuity International Ltd. (Icence transferred from Riobal One Communications Ltd. (19/10/02) Gailleo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO NO NO INO INO INO INO NO	Licensee	Operational	Responded
AT & T Global Network Services Ireland Ltd. Axis Communications Broadband Partners (Ireland Ltd.) Broadband Communications Ltd. Broighter Networks Ltd. Cargo Community Systems Ltd. Cinergi Telecom Ltd. (licence transferred from Hibercall Ltd. 14/11/02) Crossan Cable EGN B.V. ESB Telecoms Ltd. European Access Providers Ltd. NO NO Genesis Internet Service Provider Ltd. NO Genuity International Inc. Global Crossing Ireland Ltd. Equant Systems Ltd. (licence transferred from NO NO Galileo Nederland BV (previously known as Timas Ltd.) IDirect Inish Broadband Internet Services NO			to QR
Ltd. Axis Communications	Alord Holdings Ltd.	YES	YES
Axis Communications Broadband Partners (Ireland Ltd.) Broadband Communications Ltd. Broighter Networks Ltd. Cargo Community Systems Ltd. Cinergi Telecom Ltd. (licence transferred from Hibercall Ltd. 14/11/02) Crossan Cable EGN B.V. ESB Telecoms Ltd. European Access Providers Ltd. NO Genuity International Inc. Global Crossing Ireland Ltd. Equant Systems Ltd. (licence transferred from NO NO Callileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO	AT & T Global Network Services Ireland	YES	YES
Broadband Partners (Ireland Ltd.) Broadband Communications Ltd. Broighter Networks Ltd. Cargo Community Systems Ltd. Cinergi Telecom Ltd. (licence transferred from Hibercall Ltd. 14/11/02) Crossan Cable NO EGN B.V. ESB Telecoms Ltd. NO Flag Telecom NO Genesis Internet Service Provider Ltd. Global Crossing Ireland Ltd. Genuity International Inc. Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO NO Indigo Irish Broadband Internet Services B.V. KPNOwest Carrier Services B.V. Lake Communications Systems NO NO NO NO Redianz Connect Services NO NO NO NO NO NO NO NO NO N	<u>Ltd</u> .		
Broadband Communications Ltd. Broighter Networks Ltd. Cargo Community Systems Ltd. Cinergi Telecom Ltd. (licence transferred from Hibercall Ltd. 14/11/02) Crossan Cable RON EGN B.V. ESB Telecoms Ltd. NO Flag Telecom NO NO Genesis Internet Service Provider Ltd. Global Crossing Ireland Ltd. Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO RON Indigo Irish Broadband Internet Services B.V. KPNOWest Carrier Services B.V. KPNOWest Carrier Services B.V. Lake Communications Systems NO NO NO NO NO NO NO NO NO N	Axis Communications	NO	NO
Broighter Networks Ltd. Cargo Community Systems Ltd. Cinergi Telecom Ltd. (licence transferred from Hibercall Ltd. 14/11/02) Crossan Cable EGN B.V. ESB Telecoms Ltd. European Access Providers Ltd. Flag Telecom Genesis Internet Service Provider Ltd. Genuity International Inc. Genuity International Ltd. Flag Telecom Global Crossing Ireland Ltd. Fequant Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO IDirect NO NO NO INO INO INO INO INO INO INO IN	Broadband Partners (Ireland Ltd.)	NO	NO
Cargo Community Systems Ltd. Cinergi Telecom Ltd. (licence transferred from Hibercall Ltd. 14/11/02) Crossan Cable RO EGN B.V. ESB Telecoms Ltd. European Access Providers Ltd. Flag Telecom Genesis Internet Service Provider Ltd. Genuity International Inc. Global Crossing Ireland Ltd. Equat Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. IDirect Irish Broadband Internet Services NO NO NO NO INO INO INO INO I	Broadband Communications Ltd.	NO	YES
Cinergi Telecom Ltd. (licence transferred from Hibercall Ltd. 14/11/02) Crossan Cable EGN B.V. ESB Telecoms Ltd. European Access Providers Ltd. Flag Telecom Genesis Internet Service Provider Ltd. Genuity International Inc. Genuity International Ltd. Equant Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO Indigo Irish Broadband Internet Services NO Kokomo Telecom Ltd. KPNQwest Carrier Services B.V. MediaNet Ireland Ltd. NO NO MediaNet Ireland Ltd. NO NO NO NO NO NO NO NO NO N	Broighter Networks Ltd.	NO	YES
Hibercall Ltd. 14/11/02) Crossan Cable NO NO NO NO	Cargo Community Systems Ltd.	YES	YES
EGN B.V. ESB Telecoms Ltd. European Access Providers Ltd. Flag Telecom Genesis Internet Service Provider Ltd. Genuity International Inc. Genuity International Inc. Global Crossing Ireland Ltd. Equant Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO Indigo Irish Broadband Internet Services NO INO INO Kokomo Telecom Ltd. Kohomo Telecom Ltd. NO NO NO KPNQwest Carrier Services B.V. Lake Communications Systems NO NO MediaNet Ireland Ltd. NO NO NO NO Metromedia Fibre Network Ireland Ltd. NO NO Radianz Connect Services NO NO Radianz Connect Services NO NO NO RO RO RO RO RO RO RO		YES	YES
ESB Telecoms Ltd. European Access Providers Ltd. Flag Telecom NO NO Genesis Internet Service Provider Ltd. NO NO Genuity International Inc. Genuity International Inc. Genuity International Inc. Global Crossing Ireland Ltd. FEGUATE Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO Indigo Indigo YES YES Irish Broadband Internet Services NO NO NO IXNET UK Ltd. NO NO NO KONO KOROMO Telecom Ltd. NO NO NO NO NO NO NO MediaNet Ireland Ltd. NO	Crossan Cable	NO	NO
European Access Providers Ltd. Flag Telecom NO NO Genesis Internet Service Provider Ltd. NO Genuity International Inc. Genuity International Inc. Global Crossing Ireland Ltd. Flag Telecom NO NO Genuity International Inc. YES YES Global Crossing Ireland Ltd. YES YES Function Systems Ltd. (licence transferred from Robot No Robot No Robot No Robot No NO NO NO Indigo Indigo YES YES Irish Broadband Internet Services NO NO NO IXNET UK Ltd. NO NO NO Kokomo Telecom Ltd. NO NO NO KPNQwest Carrier Services B.V. Lake Communications Systems MediaNet Ireland Ltd. NO NO NO Metromedia Fibre Network Ireland Ltd. NO NO NO Radianz Connect Services NO NO NO Radianz Connect Services	EGN B.V.	YES	YES
Flag Telecom Genesis Internet Service Provider Ltd. Genuity International Inc. Genuity International Inc. Genuity International Inc. Global Crossing Ireland Ltd. Equant Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO Indigo Indigo YES YES YES Irish Broadband Internet Services NO NO IXNET UK Ltd. NO NO Kokomo Telecom Ltd. NO NO KPNQwest Carrier Services B.V. Lake Communications Systems MediaNet Ireland Ltd. NO NO Metromedia Fibre Network Ireland Ltd. NO NO Radianz Connect Services NO NO Radianz Connect Services	ESB Telecoms Ltd.	NO	YES
Genesis Internet Service Provider Ltd. Genuity International Inc. Global Crossing Ireland Ltd. Feguant Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO NO IDirect Indigo YES YES YES Irish Broadband Internet Services NO NO IXNET UK Ltd. NO Kokomo Telecom Ltd. NO KPNQwest Carrier Services B.V. Mo MediaNet Ireland Ltd. NO NO MediaNet Ireland Ltd. NO NO NO Radianz Connect Services NO NO NO Roo Radianz Connect Services NO NO NO NO ROO ROO ROO NO ROO NO N	European Access Providers Ltd.	NO	NO
Genuity International Inc. Global Crossing Ireland Ltd. Equant Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. IDirect Indigo Irish Broadband Internet Services Irish Broadband Internet Services In NO IXNET UK Ltd. Kokomo Telecom Ltd. Kokomo Telecom Ltd. Kokomo Telecom Ltd. NO NO MediaNet Ireland Ltd. NO NO MediaNet Ireland Ltd. NO NO NO Metromedia Fibre Network Ireland Ltd. NO NO Radianz Connect Services NO NO NO NO Roo Roo NO NO NO NO NO NO NO NO NO	Flag Telecom	NO	NO
Global Crossing Ireland Ltd.YESYESEquant Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02)NONOGalileo Nederland BV (previously known as Timas Ltd.)YESYESGTS Network (Ireland) Ltd.NONOIDirectNONOIndigoYESYESIrish Broadband Internet ServicesNONOIXNET UK Ltd.NONOKokomo Telecom Ltd.NONOKPNQwest Carrier Services B.V.NONOLake Communications SystemsNONOMediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONoRadianz Connect ServicesNONO	Genesis Internet Service Provider Ltd.	NO	NO
Equant Systems Ltd. (licence transferred from Global One Communications Ltd. 29/10/02)NONOGalileo Nederland BV (previously known as Timas Ltd.)YESYESGTS Network (Ireland) Ltd.NONONOIDirectNONONOIndigoYESYESIrish Broadband Internet ServicesNONONOIXNET UK Ltd.NONONOKokomo Telecom Ltd.NONONOKPNQwest Carrier Services B.V.NONONOLake Communications SystemsNONONOMediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO	Genuity International Inc.	YES	YES
Global One Communications Ltd. 29/10/02) Galileo Nederland BV (previously known as Timas Ltd.) GTS Network (Ireland) Ltd. NO IDirect NO Indigo YES YES YES Irish Broadband Internet Services NO IXNET UK Ltd. NO Kokomo Telecom Ltd. NO KPNQwest Carrier Services B.V. Lake Communications Systems NO MediaNet Ireland Ltd. NO NO Metromedia Fibre Network Ireland Ltd. NO Radianz Connect Services NO NO NO Radianz Connect Services NO NO NO NO NO NO NO NO NO N	Global Crossing Ireland Ltd.	YES	YES
Timas Ltd.) GTS Network (Ireland) Ltd. NO IDirect NO Indigo YES YES Irish Broadband Internet Services NO NO IXNET UK Ltd. NO Kokomo Telecom Ltd. NO KPNQwest Carrier Services B.V. Lake Communications Systems NO MediaNet Ireland Ltd. NO NO NO Metromedia Fibre Network Ireland Ltd. NO NO Radianz Connect Services NO NO NO NO NO NO NO NO NO N		NO	NO
IDirectNONOIndigoYESYESIrish Broadband Internet ServicesNONOIXNET UK Ltd.NONOKokomo Telecom Ltd.NONOKPNQwest Carrier Services B.V.NONOLake Communications SystemsNONOMediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO		YES	YES
IndigoYESYESIrish Broadband Internet ServicesNONOIXNET UK Ltd.NONOKokomo Telecom Ltd.NONOKPNQwest Carrier Services B.V.NONOLake Communications SystemsNONOMediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO	GTS Network (Ireland) Ltd.	NO	NO
Irish Broadband Internet ServicesNONOIXNET UK Ltd.NONOKokomo Telecom Ltd.NONOKPNQwest Carrier Services B.V.NONOLake Communications SystemsNONOMediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO	<u>IDirect</u>	NO	NO
IXNET UK Ltd.NONOKokomo Telecom Ltd.NONOKPNQwest Carrier Services B.V.NONOLake Communications SystemsNONOMediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO	<u>Indigo</u>	YES	YES
Kokomo Telecom Ltd.NONOKPNQwest Carrier Services B.V.NONOLake Communications SystemsNONOMediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO	Irish Broadband Internet Services	NO	NO
KPNQwest Carrier Services B.V.NONOLake Communications SystemsNONOMediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO	IXNET UK Ltd.	NO	NO
Lake Communications SystemsNONOMediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO	Kokomo Telecom Ltd.	NO	NO
MediaNet Ireland Ltd.NONOMetromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO	KPNQwest Carrier Services B.V.	NO	NO
Metromedia Fibre Network Ireland Ltd.NONONext TelecomNONORadianz Connect ServicesNONO	Lake Communications Systems	NO	NO
Next Telecom NO NO Radianz Connect Services NO NO	MediaNet Ireland Ltd.	NO	NO
Radianz Connect Services NO NO	Metromedia Fibre Network Ireland Ltd.	NO	NO
	Next Telecom	NO	NO
DIII LLL	Radianz Connect Services	NO	NO
KIIIDANK LTd. YES NO	Rillbank Ltd.	YES	NO
Savvis Europe B.V. YES YES	Savvis Europe B.V.	YES	YES
SkyNet NO NO	<u>SkyNet</u>	NO	NO
Sonic Telecom NO YES	Sonic Telecom	NO	YES

 $^{^{29}}$ Fixed operators who hold a basic telecommunications licence

_

SITA	NO	NO
<u>Sprintlink</u>	NO	NO
Tarwin Trading Ltd.	NO	NO
Tele Media International Ltd.	NO	NO
Torc Telecom	NO	NO
Universal Access Ireland Ltd.	NO	YES
Waterland Technologies	NO	NO
Web-Sat Ltd.	NO	YES

CABLE OPERATORS³⁰

Licensee	Operational	Responded to QR
<u>Casey Cable Vision Ltd.</u>	YES	NO

_

 $^{^{}m 30}$ Cable operators who hold a basic telecommunications licence