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Communications Regulation

Irish Communications Market

Quarterly Key Data Report

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An Coimisiún um Rialáil Cumarsáide

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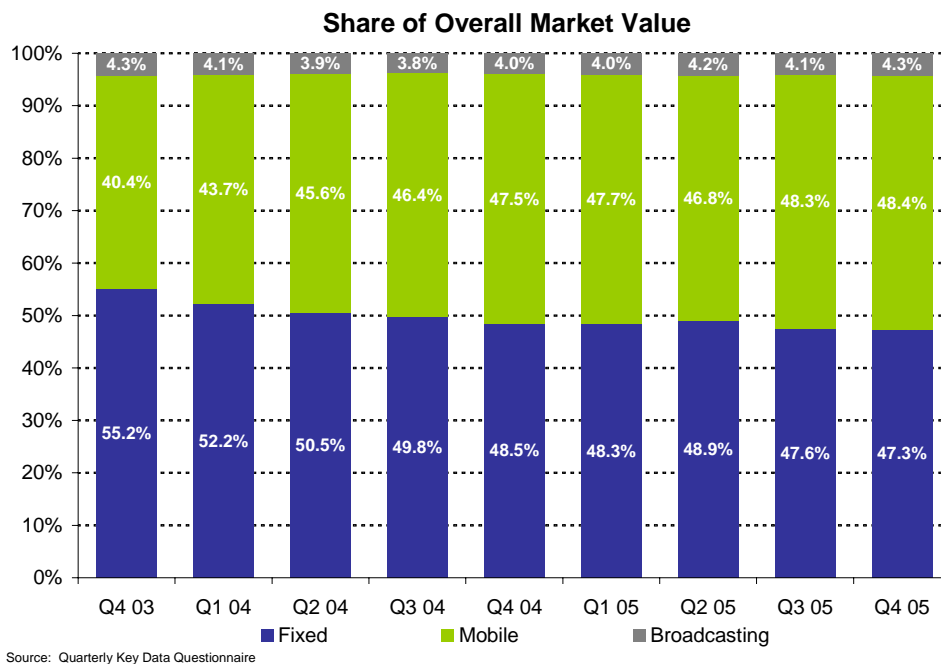
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1 Overall Market Data

The data in this review is based on returns from authorised operators for the period starting 1 September to 31st December 2005. The report is based on submissions from 52 operators, which represent almost all market activity.

1.1 Overall Electronic Communications Revenues¹

Figure 1.1.1– Fixed, Mobile & Broadcasting as a % of Total Revenues²



Overall electronic communications network and service revenues at the end of December 2005 were €1.02bn for the quarter, or approximately €4.07 billion per annum on an annualised basis. Revenue growth this quarter represented a 1.4% increase on the previous quarter. Figure 1.1.1 shows a breakdown of revenue between each of the main categories of electronic communications services; fixed line revenues now account for 47.3% of electronic communications revenues, while mobile services have increased their share of industry revenue to 48.4%. Broadcasting sector revenue also increased to 4.3% of total market revenues in Q4, 2005.³

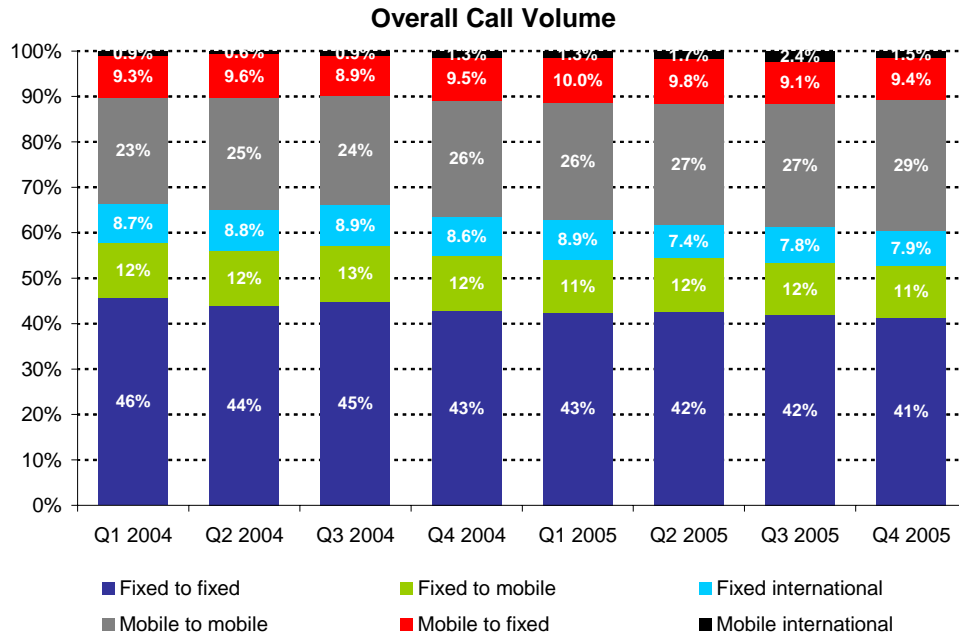
¹ For further detail on terms and definitions see ComReg Document Number 06/15a Explanatory Memorandum to Quarterly Key Data Report.

² The following services are accounted for in the total revenues figure: **fixed** (interconnection, retail narrowband services, leased line & managed services, broadband and other (including web-hosting, co-location services, directory publication & other services), **mobile** (connection, voice and data services, roaming) and **broadcasting** (including cable/MMDS broadcasting services, connection, rental and other charges).

³ Broadcasting revenues include only those submitted by cable and MMDS operators in Ireland, and not revenues attributable to other satellite or terrestrial broadcasting operators

1.2 Overall Call Volumes

Figure 1.2.1 Share of Total Voice Call Volumes



Source: Quarterly Key Data Questionnaire

Figure 1.2.1 illustrates the overall percentage values of a number of categories of voice call traffic. Total voice traffic over both fixed and mobile networks totalled 3.6 billion minutes in this quarter, a 2% increase in voice traffic since last quarter, and a 6% increase in voice traffic since Q4, 2004. The overall trend in voice traffic is a small decrease in fixed-to-fixed voice traffic as a proportion of total traffic and a corresponding small increase in mobile-to-mobile traffic as a proportion of total voice minutes. Traffic between fixed and mobile voice networks as a proportion of all traffic has remained relatively stable over the period of analysis, with calls from mobile phones to fixed lines having around a 9% share of total traffic minutes, and fixed line to mobile traffic accounting for around 11% of traffic for the period of analysis.

An analysis of minute volumes in the voice market suggests a very gradual growth in the proportion of mobile to mobile minutes at the expense of fixed line traffic. However, evidence from a ComReg commissioned Amárach Trends survey in Q4, 2005⁴ suggests that consumers believe their fixed and mobile voice services to be distinctly different, and not a close substitute for each other. Of respondents interviewed, 44% would not be willing to give up their fixed line telephone, even if the costs of using fixed or mobile telephones were similar.

⁴ ComReg Document: 06/08a

1.3 Number of Authorisations

Figure 1.3.1 Total Number of Authorisations

Total Authorisations	December 2005
No. of fixed and wireless authorisations	304
No. of mobile telephony authorisations	4
No. of broadcasting authorisations (incl. Cable TV, MMDS, Deflectors)	45
Total Number	353

Before providing networks or services to third parties, operators are required to submit a notification to ComReg for the purposes of compiling a register of such operators. At the date of publication of this report there were 353 authorised undertakings in Ireland. Since the publication of the last report, an additional two authorisations have been granted in the fixed and wireless authorisations category. It should be noted that the list above notes the number of general authorisations granted by ComReg under the European Framework for Authorisations. It does not reflect the total number of commercially active organisations or entities currently operating in the market.

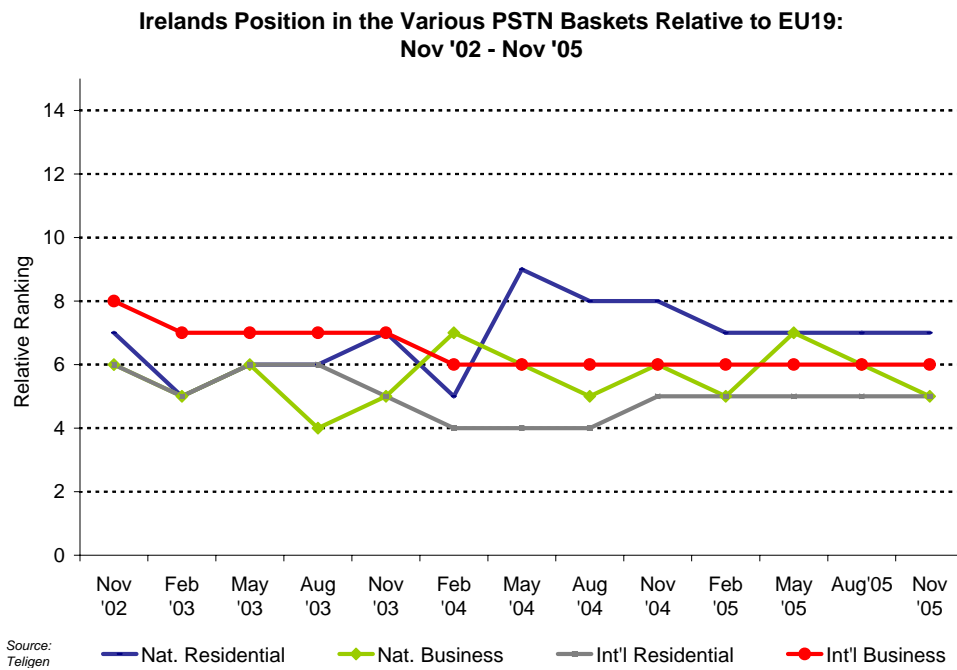
1.4 Pricing Overview

This section examine Ireland's current and previous ranking based on price in various consumer baskets against other EU countries. Data on basket prices are provided to ComReg by Teligen and are calculated using an OECD-approved methodology for assessing comparative pricing among electronic communications services. In previous quarters ComReg's Teligen T-Basket data presented one month in arrears in the Quarterly Key Data Report. To ensure the absolute accuracy of data received from Teligen for the purposes of benchmarking, ComReg will now only use data published one quarter in arrears. As a result, November 2005 baskets have been published again in this quarter. ComReg are restating the mobile basket data based on an error in the mobile low-user post-paid and the medium-user baskets as published in the Q3 2005 quarterly report, published in December 2005.

1.4.1 PSTN

Figure 1.4.1 shows the movement in Ireland’s position relative to other EU countries in all PSTN baskets since November 2002⁵. Since August, Ireland’s relative ranking has remained stable in all baskets, except the national business basket, where the position has improved one place to 5th out of 19 EU countries monitored⁶. This is the second quarter on quarter improvement in Ireland’s ranking in this basket. Ireland’s relative position is lower than the EU average price in all PSTN baskets.

Figure 1.4.1: Ireland’s Relative Position for PSTN Baskets: Nov ‘02 – Nov ‘05



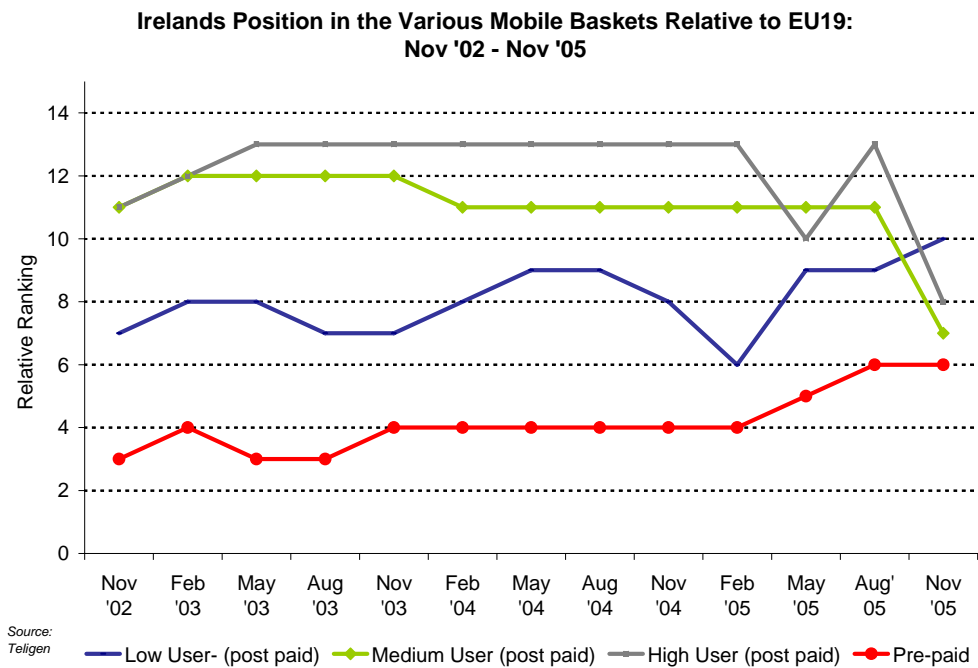
⁵ The basket data measures relative prices in a range of services against a number of EU States

⁶ The Explanatory Memorandum accompanying this report outlines the source and selection of countries monitored by the Teligen benchmarking baskets and other information such as PPP rates.

1.4.2 Mobile

Figure 1.4.2 shows the movement in Ireland’s position relative to the EU in all mobile baskets since November 2002. Since August, Ireland’s rankings in the low-user post paid basket has increased by one place within the 19 EU countries analysed, and remains higher than the EU average price. The medium and high-user post-paid baskets in contrast improved by 4 and 5 places respectively, based on new tariff packages launched by O2 in late 2005. Ireland’s position in the pre-paid basket remained in 6th place.

Figure 1.4.2: Ireland’s Relative Position for Mobile Baskets: Nov '02 – Nov '05



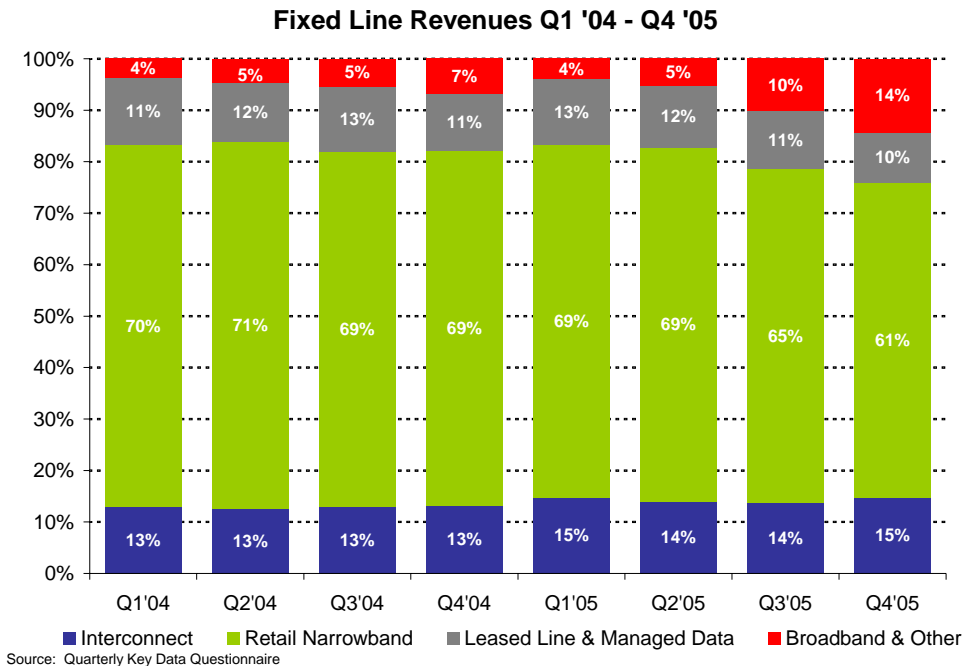
2 Fixed Market Data

2.1 Total Fixed Line Revenues

2.1.1 Total Fixed Line Revenue

Total fixed line revenues are at €481 million this quarter, an increase of almost 1% since last quarter. This growth is due to a small increase in interconnect revenues, and strong growth in broadband revenues within the fixed line market. A corresponding fall in narrowband retail markets is as a result of a small decrease in fixed line voice volumes and a decrease in narrowband internet subscriptions and the number of narrowband internet minutes reported this quarter. There is further examination of migration from narrowband to broadband internet technologies in sections 2.6 and 2.8 of this report.

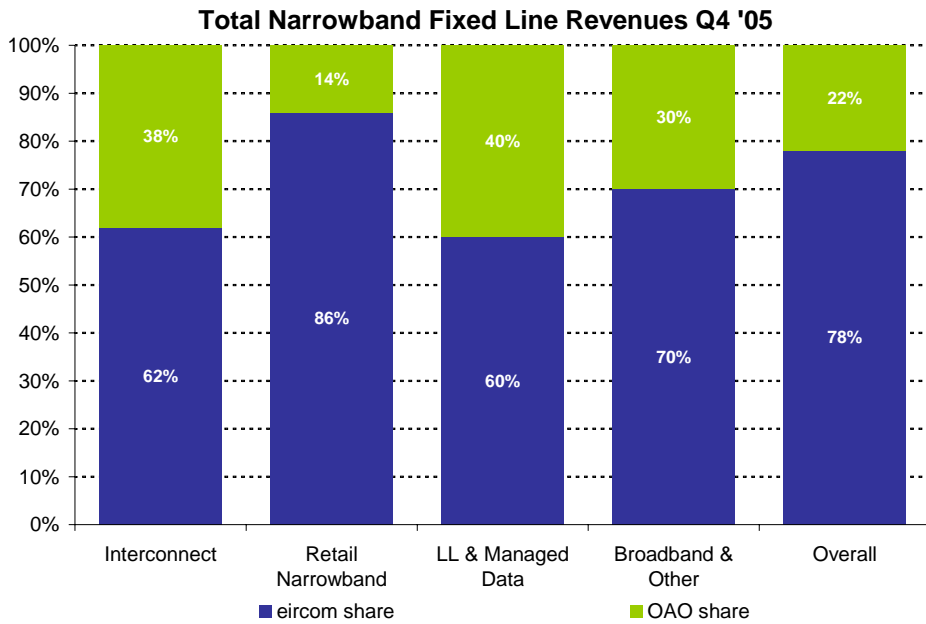
Figure 2.1.1 Total Revenue Per Service



2.1.2 Other Authorised Operators (OAO) Share of Overall Fixed Line Revenues

Figure 2.1.2 illustrates the market shares of the incumbent and other authorised operators (OAOs) in each of the fixed line service categories in Figure 2.1.1. Market shares are presented as grouped within a number of service categories which are somewhat related to each other. This classification does not reflect the specific markets identified in the recent market review process. eircom revenues represent a large share of each area, and overall eircom market share is calculated at 78%, up 1% on the previous quarter.

Figure 2.1.2 OAO Market Share



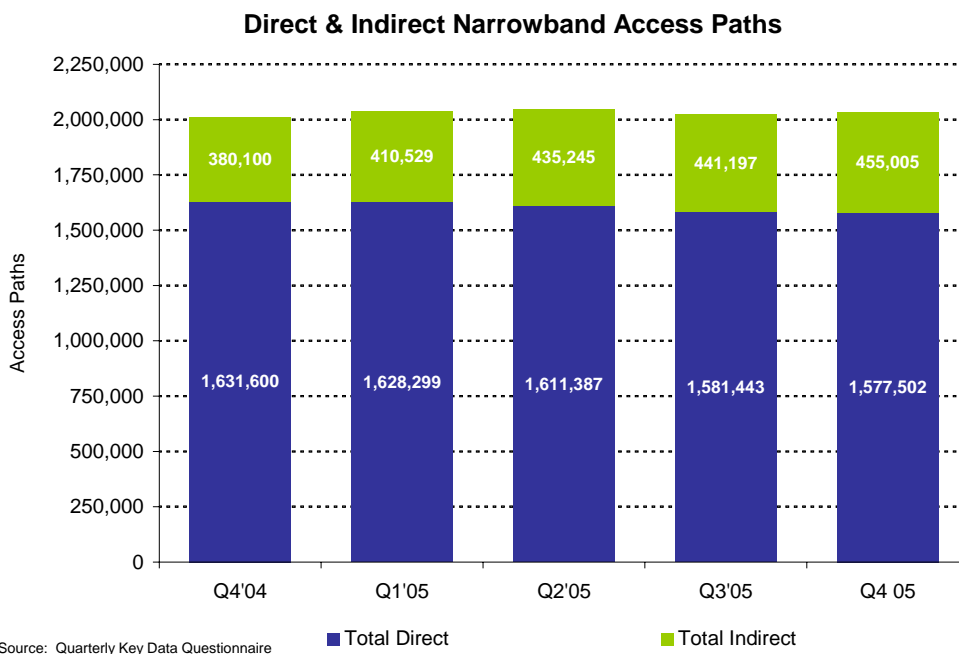
Source: Quarterly Key Data Questionnaire

2.2 Fixed Line Access

2.2.1 Access Paths

Figure 2.2.1 presents the total number of narrowband fixed access paths (PSTN and ISDN) broken out by direct and indirect access⁷ on an historical basis. There were over 2 million direct and indirect PSTN and ISDN access paths in the Irish market in Q4, 2005. Indirect paths represent 22% of all access paths in the market. The total number of access paths increased slightly this quarter. This is attributable to an increase in PSTN and ISDN access paths provided indirectly by Other Authorised Operators (OAOs).

Figure 2.2.1 Fixed Access Paths

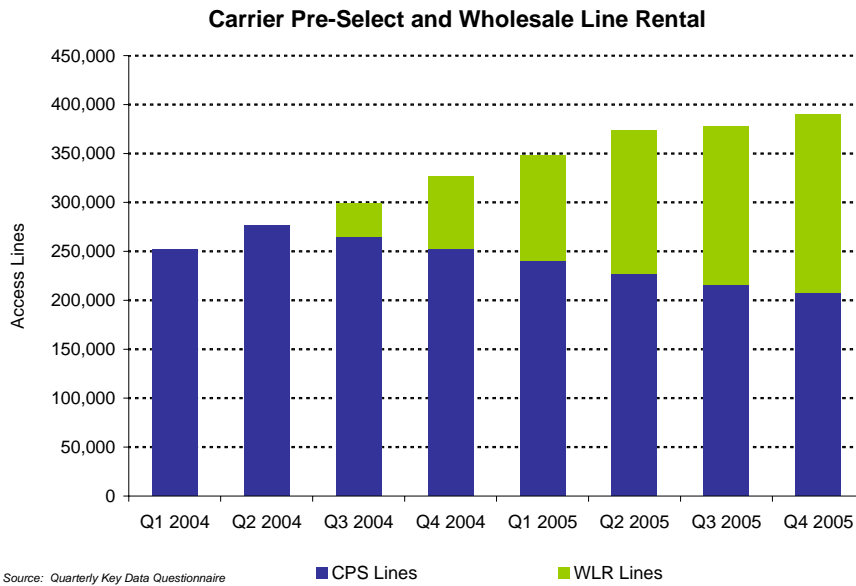


2.2.2 Indirect Access and Calls

Figure 2.2.2 illustrates the overall number of PSTN and ISDN lines provided by means of either Carrier Pre-Selection (CPS) or Wholesale Line Rental (WLR). In Quarter 4, 390,000 lines classified as either CPS or WLR lines were provided by operators other than eircom, a 3% quarterly increase, and a 19% increase in the use of in-direct access products since Q4, 2004. Growth in the number of indirect lines provided by OAOs has been driven by WLR, which allows operators to offer single-billing for both calls and rental to customers. Seven OAOs offer single billing to customers using WLR. The WLR product now accounts 47% of indirect access lines.

⁷ Indirect access is defined as an access path used to provide an electronic communications service to a customer by an operator other than eircom. Further information on indirect access is included in the explanatory memorandum document which accompanies this publication.

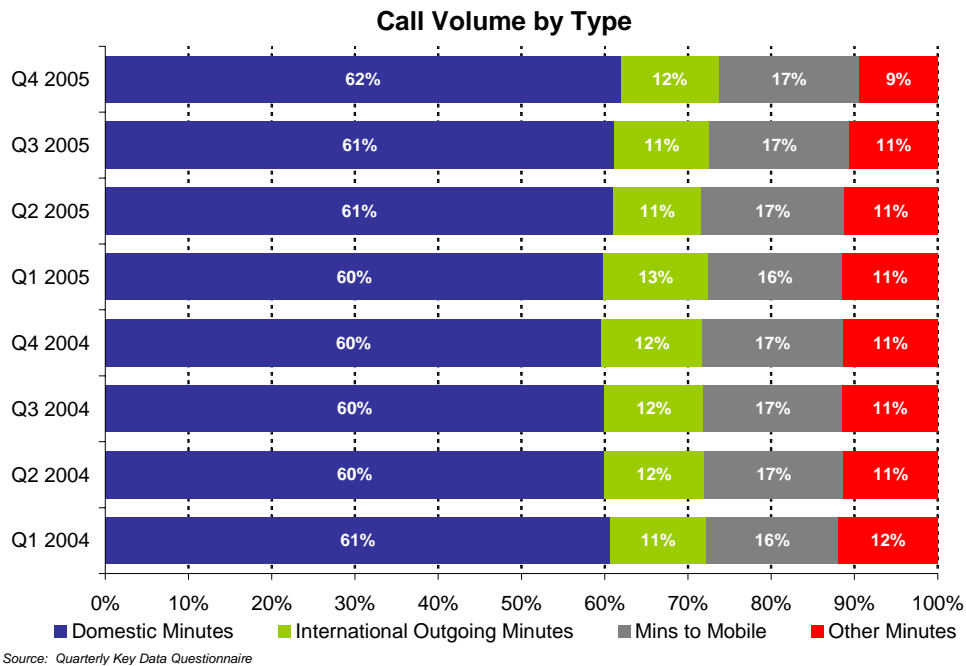
Figure 2.2.2 Indirect Access Lines



2.3 Fixed Voice Call Volumes

Figure 2.3.1 below illustrates the development of fixed voice call volumes since Q1 2004. Fixed call traffic in Q4, 2005 exceeded 2.4bn minutes, which have remained relatively stable since last quarter, and have decreased by 2% since Q4, 2004. The breakdown of minutes in the fixed line market remains relatively stable. The largest proportion of calls in the fixed line market are fixed to fixed calls, representing 62% of all fixed line minutes

Figure 2.3.1 – Fixed Voice Call Volume⁸



⁸ Domestic Calls include local & national calls; other minutes include payphone volumes, and a range of ancillary fixed voice services categorised by operators.

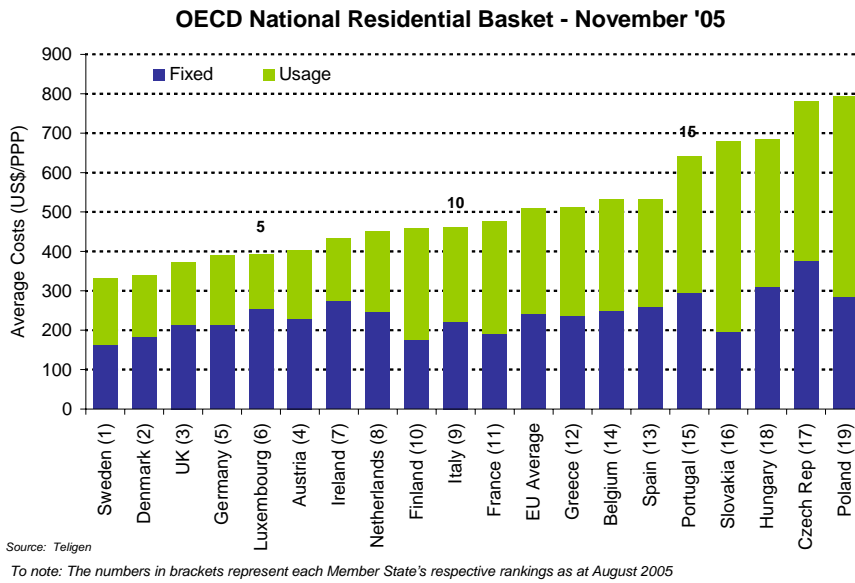
2.4 Fixed Pricing Data

2.4.1 PSTN Baskets

2.4.1.1 National Residential Basket

Figure 2.4.1.1 illustrates Ireland’s ranking in the national residential basket, based on a basket of calls and line rental. Ireland remained at 7th position overall, and five places better than the EU average in terms of price for this basket.

Figure 2.4.1.1 - OECD National Residential Basket –November 2005⁹

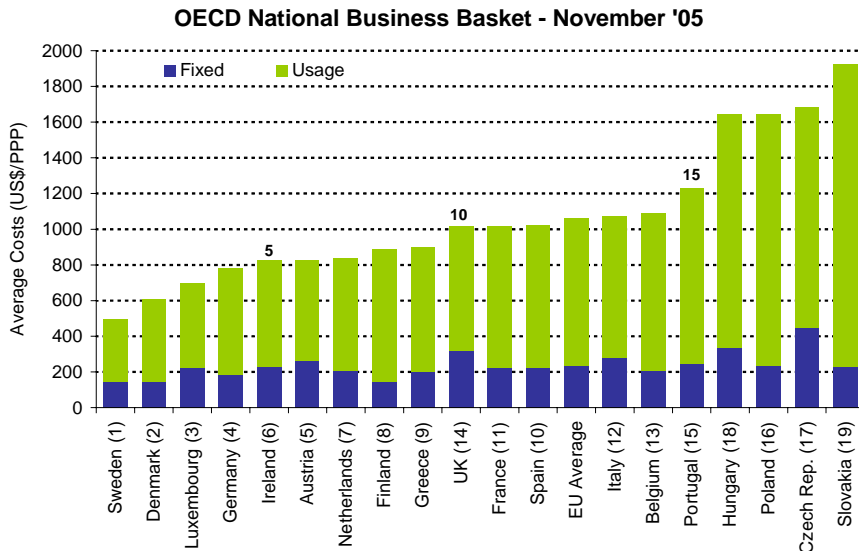


⁹ Residential tariffs include VAT. VAT rates vary between member states.

2.4.1.2 National Business Basket

Ireland has improved one place to 5th position in the national business basket since August, and is now eight places better than the EU average in terms of price. In this quarter, the improvement in business tariffs is a result of volume discounts being no longer included in the PSTN business basket in the Austrian market, rather than any change to domestic tariffs.

Figure 2.4.1.2 - OECD National Business Basket – November 2005

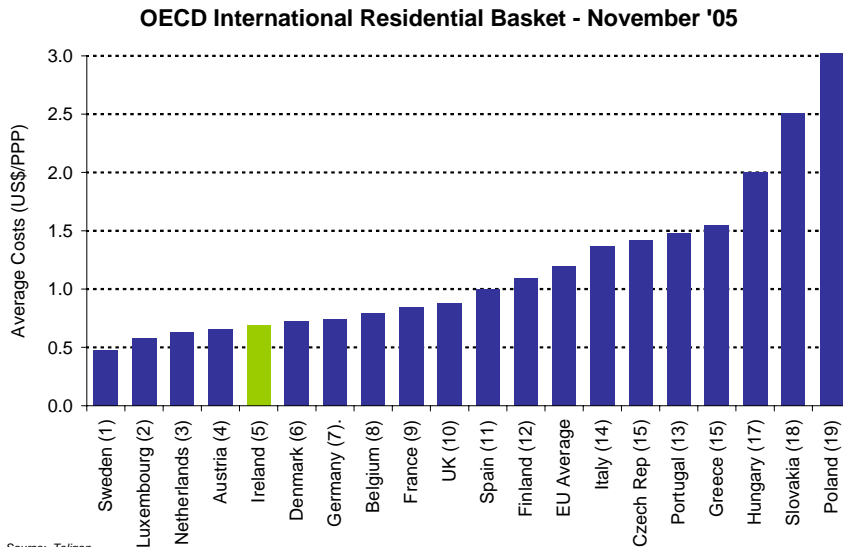


Source: Teligen
 To note: The numbers in brackets represent each Member State's respective rankings as at August 2005

2.4.1.3 International Residential Basket

Figure 2.4.1.3 shows that Ireland’s position has remained unchanged since August, and is eight places better than the EU average in terms of price.

Figure 2.4.1.3 - OECD International Residential Basket – November 2005¹⁰

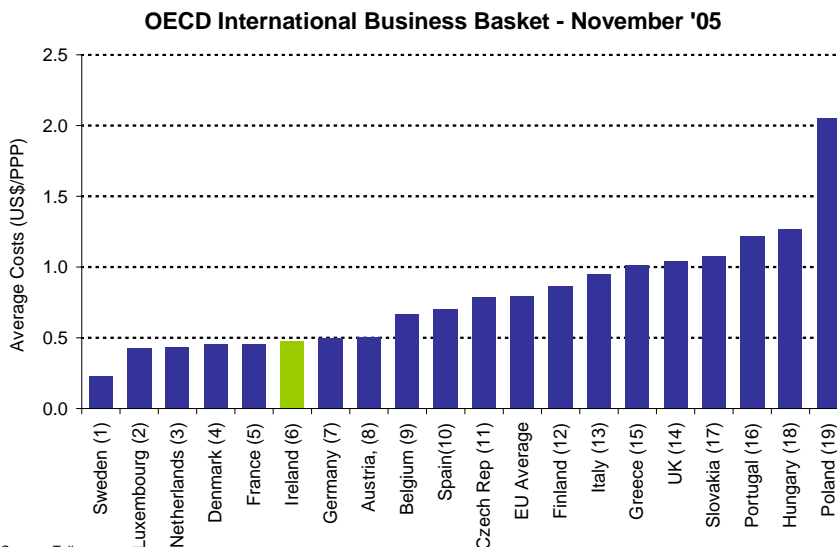


Source: Teligen
 To note: The numbers in brackets represent each Member State's respective rankings as at August 2005

2.4.1.4 International Business Basket

Ireland remained ranked in 6th place in the international business basket in November and is six places better than the EU average in terms of price.

Figure 2.4.1.4 - OECD International Business Basket – November 2005



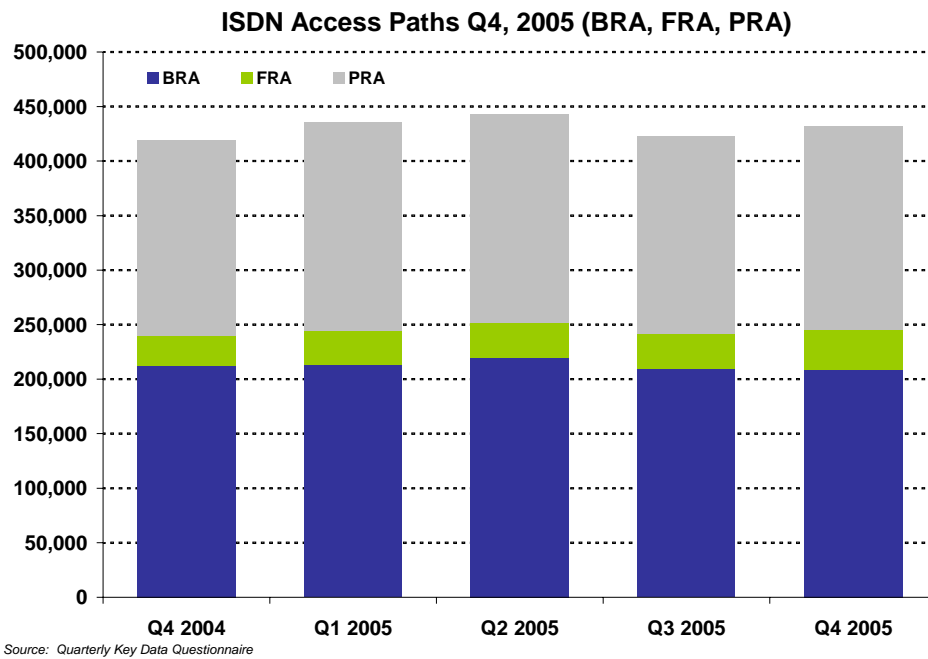
Source: Teligen
 To note: The numbers in brackets represent each Member State's respective rankings as at August 2005

¹⁰ Residential tariffs include VAT. VAT rates vary between member states.

2.5 ISDN Access

Figure 2.5.1 shows the provision of ISDN access paths in the Irish market segmented by basic, fractional and primary rate access. Basic rate ISDN access paths continue to decline, which is likely to be a result of migration towards broadband. There are around 104,000 basic rate ISDN subscribers in the market. This quarter has seen a small increase in the number of fractional and primary rate ISDN subscriptions. These services are most likely used by the enterprise sector for multiple handset telephone systems in business premises.

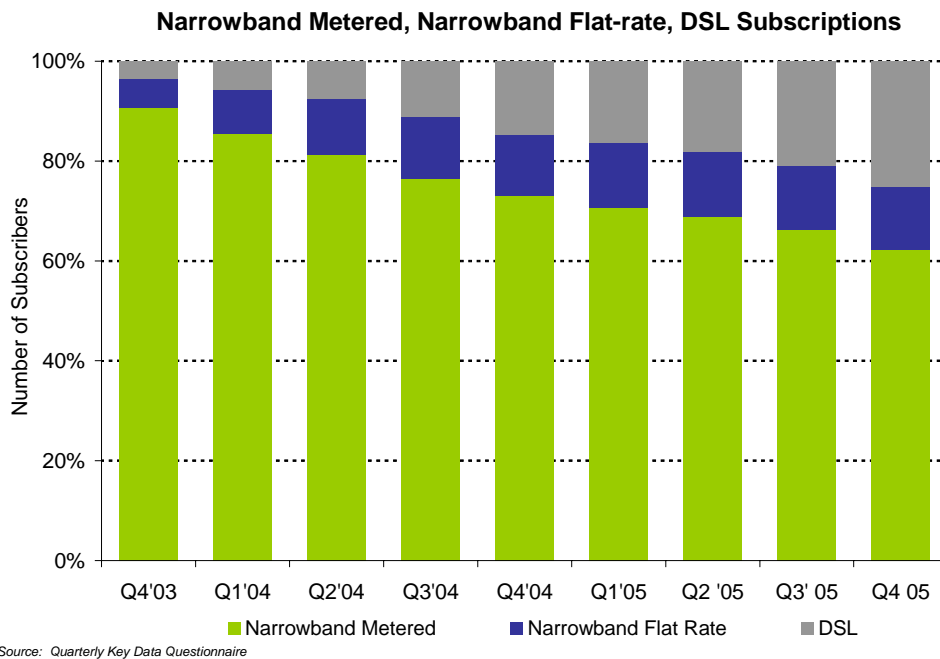
Figure 2.5.1 – ISDN Access Paths, separated by basic, fraction and primary rate access



2.6 Provision of Internet Services

Figure 2.6.1 examines a breakdown of internet subscriptions over the telephone network, by subscriptions via a narrowband metered, narrowband flat-rate, or broadband DSL connection. The chart illustrates a gradual decline in the proportion of copper-based internet subscribers using narrowband metered services, and an increasing number of internet subscribers migrating to DSL.

Figure 2.6.1 – Number of Subscribers: Narrowband¹¹ Vs Broadband¹²



In the total internet market, including subscriptions to other broadband access technologies, overall internet subscriptions have increased by 9% in 2005 and are currently estimated at 874,000. Market data suggests a trend of migration from narrowband to broadband technologies; in Dec 2004, metered dial-up represented 71% of all internet subscriptions; in Dec 2005, this has decreased to 57%. In contrast, overall broadband subscriptions, which represented 17% of internet subscriptions in Dec 2004, now account for 31% of total internet subscriptions. The use of flat rate narrowband subscriptions has remained relatively stable at 12% of all internet subscriptions in the Irish market.

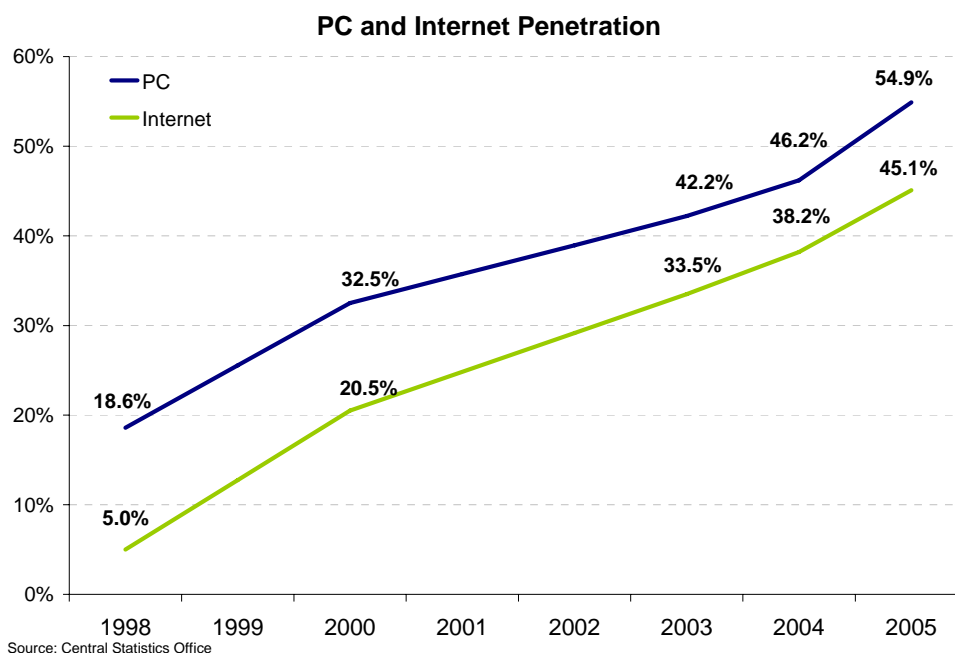
Figure 2.6.2 illustrates the household penetration of PCs and internet in Ireland as published in the Information Society and Telecommunications Report, 2005, by the Central Statistics

¹¹ This includes narrowband metered, and narrowband flat-rate products.

¹² This includes DSL subscriber numbers only.

office in February 2006¹³. It indicates a trend of increased PC and internet penetration based a survey conducted in June 2005 as part of the Quarterly National Household Survey. The report suggests that 45% of Irish households have a home internet connection. Currently, the average rate of PC and internet penetration for the Irish market is slightly below that of the EU average; however, its growth since 2000 follows a similar pattern of growth experienced by other EU countries over time.

Figure 2.6.2 – Household Penetration of PCs and Internet, 2005



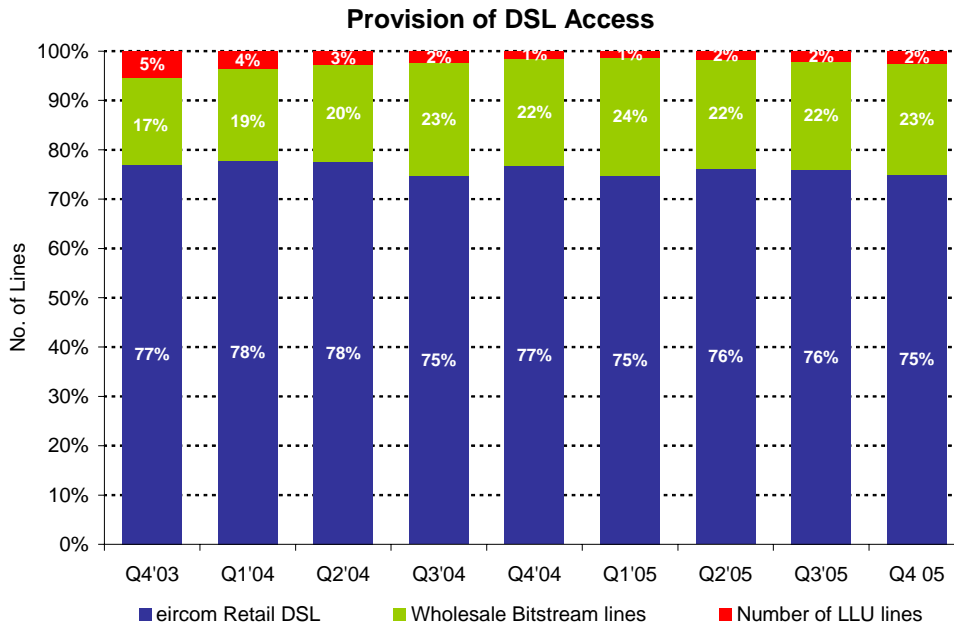
2.7 Provision of Broadband Access

Figure 2.7.1 illustrates direct and indirect provision of DSL in the Irish telecoms market. Indirect DSL is provided through eircom's wholesale bitstream products of fully unbundled loops. Indirect DSL access using either wholesale bitstream or LLU accounted for 25% of the total DSL market in Q4, 2005. At the end of December 2005, there were almost 5,000 local loops unbundled, a 38% quarterly increase in unbundled lines. Ireland's proportion of locally unbundled lines as a percentage of DSL lines, currently at 2%, remains relatively low compared to other EU countries where the average number of LLU lines as a percentage of total DSL in September 2005 was 16%¹⁴.

¹³ <http://www.cso.ie/releasespublications/documents/industry/2005/ictireland2005.pdf>

¹⁴ Comparative Data available at: <http://www.ectaportal.com/en/upload/File/Broadband%20Scorecards/Q305/Final3%20BB%20Sc%20Q3%2005.xls>

Figure 2.7.1 Provision of DSL Access



Source: Quarterly Key Data Questionnaire

2.8 Provision of Broadband Services

Figure 2.8.1 outlines total broadband subscription levels in the Irish market across a number of access platforms, and growth rates by platform for the previous twelve months.

Figure 2.8.1 – Broadband Subscribers and growth rates by Platform

Platform	Q4 05 Subs	Quarterly Growth Q305-Q405	Year-on-Year Growth Q404-Q405
DSL	202,300	21%	75%
Cable	25,000	38%	179%
FWA	40,000	62%	363%
Other ¹⁵	3,400	52%	1375%
Total	270,700	27%	103%

The largest number of net additions in the broadband market occurred in Q4, 2005 with over 58,000 new broadband subscribers in the quarter. Strongest percentage growth in subscriptions for Q4 2005 was in the fixed wireless and cable broadband markets. There are now 6 operators competing in the cable broadband market including Broadworks who began offering cable broadband commercially during the quarter.

¹⁵ Other Broadband includes Satellite and Fibre to the Premises Broadband subscriptions

Figure 2.8.2 illustrates the continued growth of broadband connections in the Irish market, with the number of broadband subscribers doubling in 2005.

Figure 2.8.2 – Broadband Subscribers by Platform

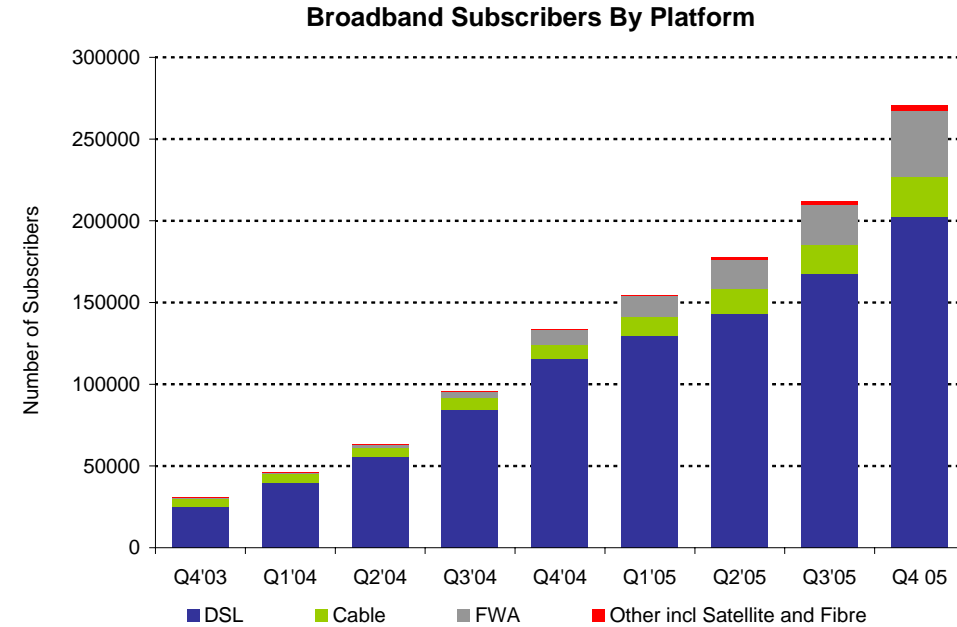


Figure 2.8.3 illustrates the Irish broadband market broken down by eircom retailed DSL, OAO DSL, and other broadband platforms as a percentage of the total broadband market. The figure illustrates the continued increase in the role of platform competition as fixed wireless and cable broadband in particular increase their presence in the market. In Q4, 2004 platforms other than DSL represented 13% of total broadband subscriptions; however this has increased to 25% of total broadband subscriptions in Q4, 2005. eircom's retail DSL offering now represents 56% of total broadband subscriptions.

Figure 2.8.3 – eircom DSL share of Total Broadband Market

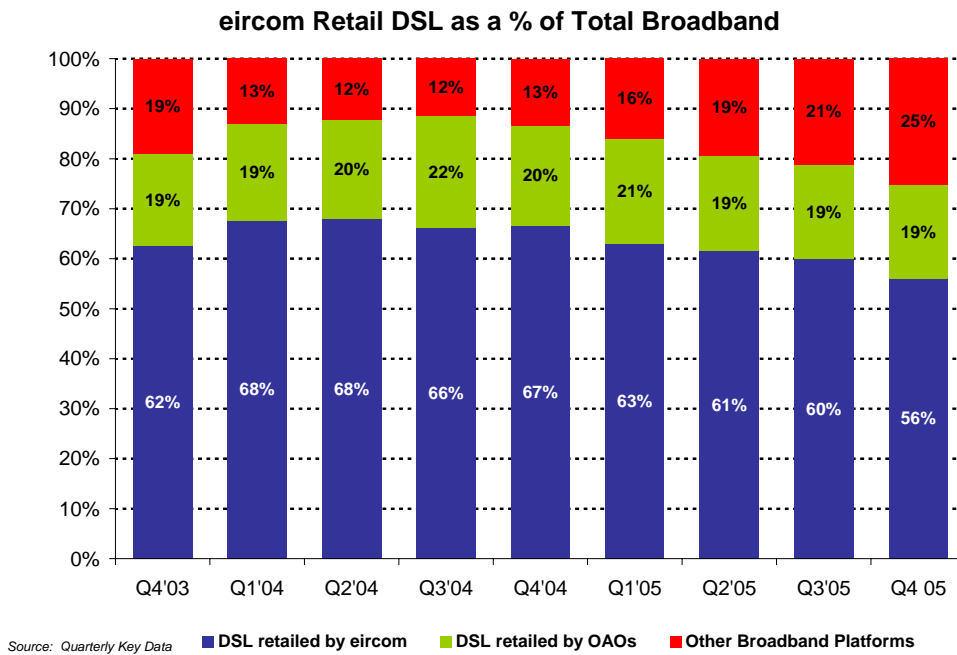
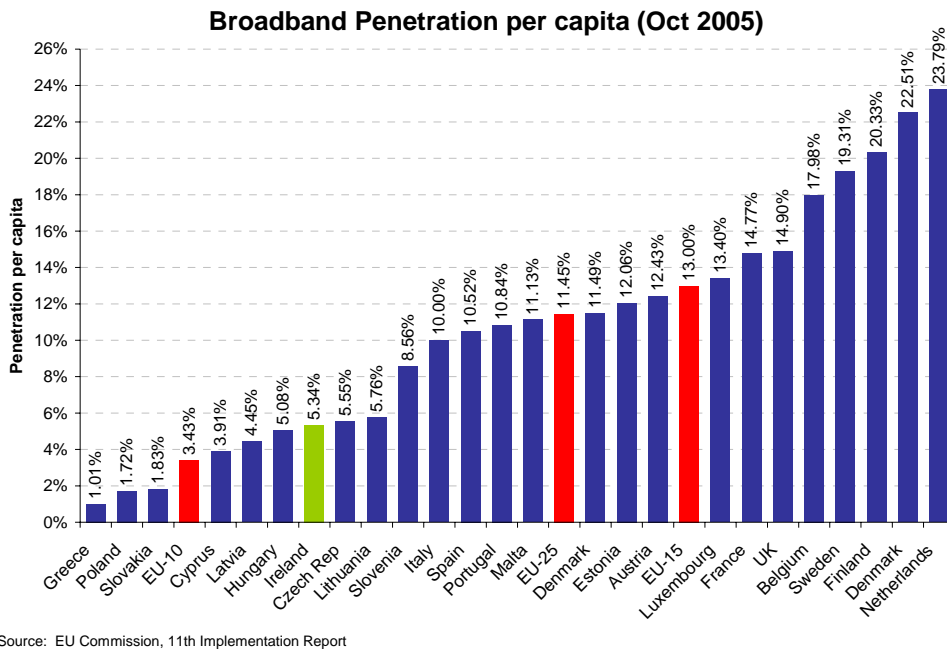


Figure 2.8.4 illustrates broadband penetration rates measured on a per capita basis by the EU Commission for its 11th Implementation Report. Data provided benchmarks Ireland's broadband penetration relative to EU-25 countries in October 2005. Ireland's broadband penetration remains among the lowest of the EU countries and was calculated at 5.34% in October 2005, although broadband penetration in Dec 2005 had reached 6.5%¹⁶.

Figure 2.8.4 – Broadband Penetration Rate



¹⁶ Broadband penetration rate is based on an updated population estimate of 4.1307 million as published by the CSO. Previous penetration estimates have a CSO population estimate of 4.03 million.

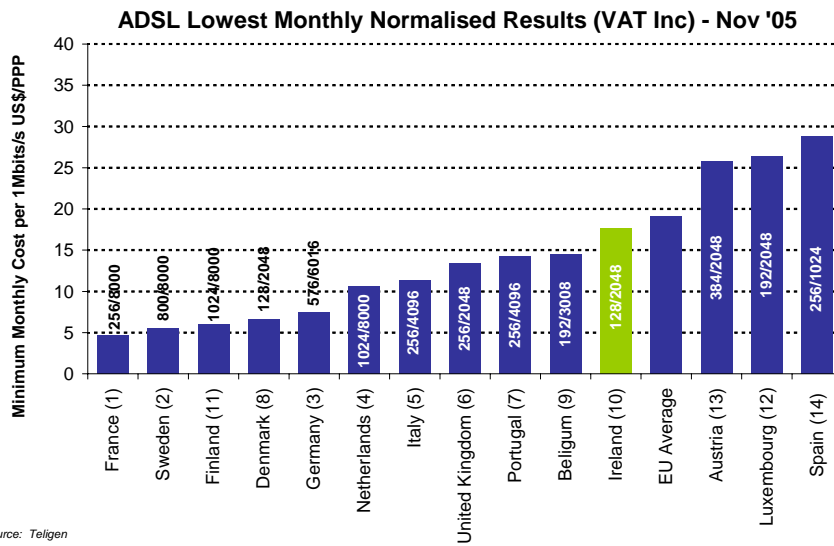
2.9 ADSL Pricing Data¹⁷

The following two ADSL baskets should be examined together to provide a complete comparison of ADSL prices across the EU. More detailed information on how these baskets are constructed can be found in the Explanatory Memorandum accompanying this report. The data presented is for November 2005, however ComReg notes that there have been further reductions in broadband tariffs in January 2006.

Lowest Monthly Rental ADSL Basket (Normalised)¹⁸

Ireland ranked in 11th place in the normalised ADSL basket, and is one place better than the EU average in terms of price, among the 19 European nations monitored.

Figure 2.9.1 – Lowest Monthly Rental ADSL Basket (Normalised) – November '05

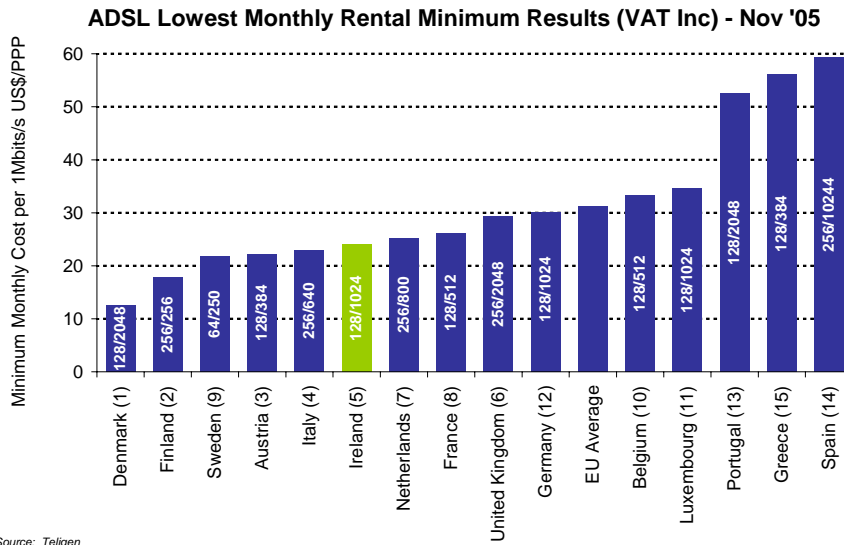


Source: Telegen
 N.B. Greece has not yet been included in the graph. Price of comparable product is \$93.48 for 256/1024 product
 The numbers in brackets represent each Member State's respective rankings as at August 2005

¹⁷ This section does not include ADSL tariff packages that are offered as special promotions. All tariffs are inclusive of VAT. VAT rates vary between Member States.

¹⁸ The normalised (1Mbit/s) results show the cheapest offering in each country, per 1 Mbit/s of service. This method may favour countries offering higher speeds. Figures in boxes represent the upload/download speed (kb/s) of the service offered.

Figure 2.9.2 – Lowest Monthly Rental ADSL Basket (Minimum) – November '05



Source: Teligen
The numbers in brackets represent each Member State's respective rankings as at August 2005

Lowest Monthly Rental ADSL Basket (Minimum)¹⁹

In November Ireland ranked 6th out of the EU-15 countries and was 5 places better than the EU average in terms of price in this basket.

2.10 Leased Line Tables

Figure 2.10.1 shows the total number of traditional point to point leased lines, both national and international, provided at the wholesale and retail level. Leased lines are used to provide dedicated data services to medium and large businesses.²⁰

Figure 2.10.1 – Fixed Data Access Lines

Platform	Q3 2004	Q4 2004	Q1 2005	Q2 2005	Q3 2005	Q4 2005
Leased lines (retail)	18,801	18,669	18,231	17,703	16,753	17,319
Leased lines (wholesale)	8,508	8,319	9,092	8,819	8,946	8,670

¹⁹ The minimum results show the lowest monthly rental charge offered in each country. This method may favour countries offering lower speeds. Figures in boxes represent the upload / download speed (kb/s) of the service offered.

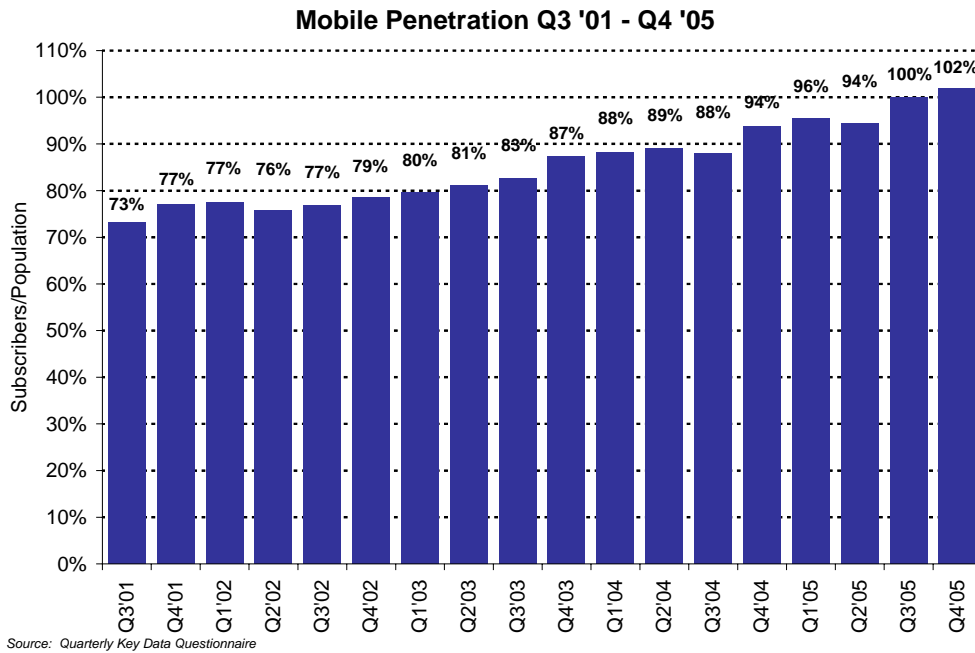
²⁰ For ComReg definitions please see the Quarterly Key Data Explanatory Memorandum published with this document

3 Mobile Market Data²¹

3.1 Number of Subscribers and Penetration Rate

3.1.1 Irish Mobile Penetration Rate

Figure 3.1.1 – Irish Mobile Penetration Rate



There are now 4.2 million 2G and 3G mobile subscribers in Ireland, with Vodafone Ireland announcing that it had signed up 172,000 customers to its Vodafone live! with 3G service by January 2006²². Figure 3.1.1 illustrates the growth in mobile penetration over the last number of years and shows the penetration rate for Q4, 2005 at 102%²³. Subscribers in this report are measured based on the number of active SIM cards and it should be noted that subscribers may have more than one active SIM card. The Q4 2005 Amárach Trends survey²⁴ found that of the 84% of residential users who have a mobile phone, 4% have more than one mobile subscription. The main reason given for this was to have one subscription for personal use, and the other for business use.

²¹ Please note that the following section includes data submitted by Vodafone, O2 and Meteor only

²² Business World Live, 16/03/06

²³ Mobile penetration rate is based on an updated population estimate of 4.131 million as published by the CSO

²⁴ ComReg 06/08a

3.1.2 European Mobile Penetration Rates

Figure 3.1.2 illustrates national mobile penetration rates across the EU. Ireland’s mobile penetration rate was on a par with Denmark and the Netherlands at 102%, at the end of December 2005. Compared with EU-15 countries Ireland is 5% behind the EU average. Only 3 countries in the EU-15 now have mobile penetration rates of less than 100%.

Figure 3.1.2 – European Mobile Penetration Rates

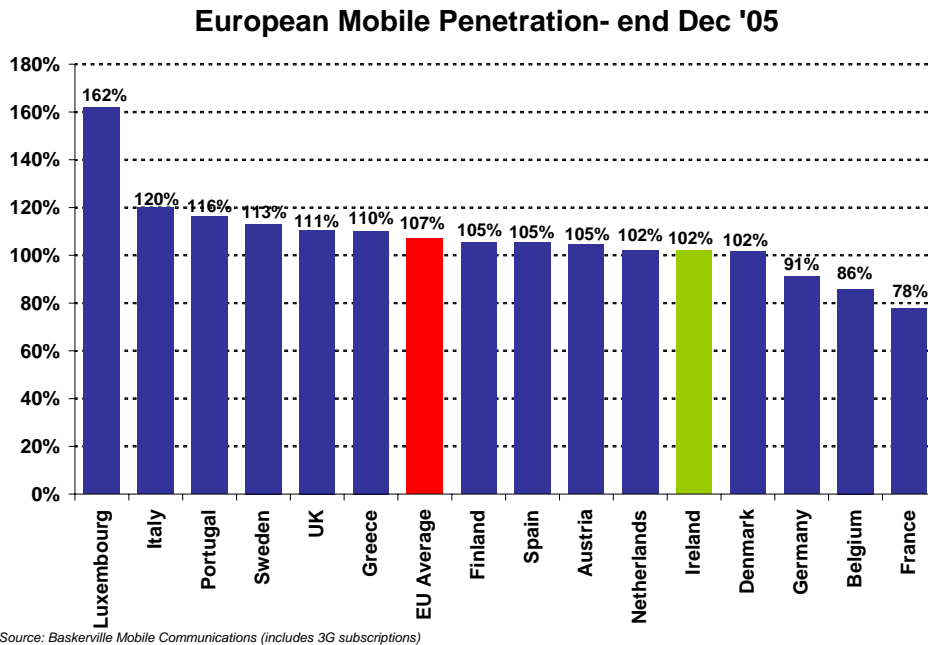
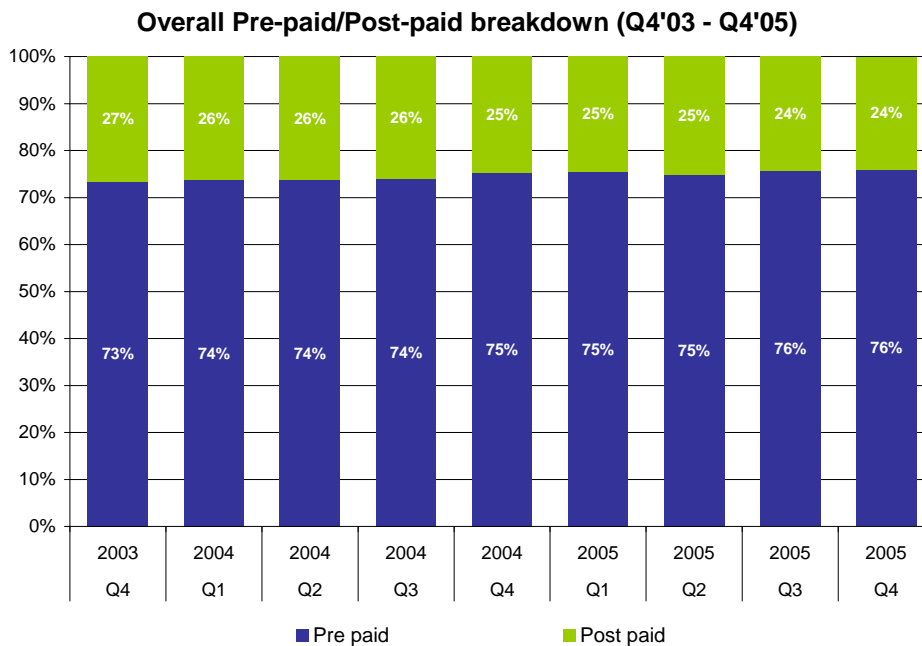


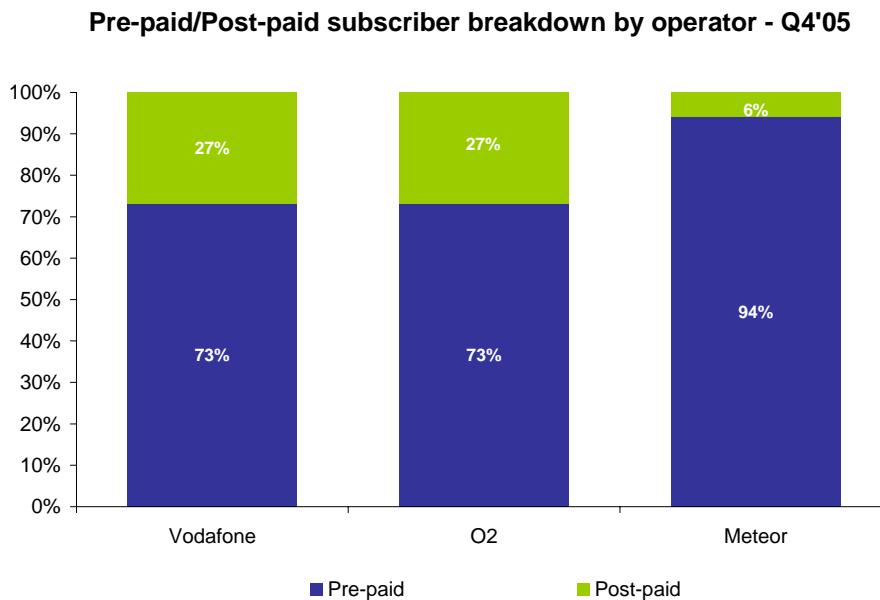
Figure 3.1.3 – Number of Subscribers (Pre-Paid/Post Paid)



3.1.3 Subscribers Pre-Paid / Post-Paid Comparison

Figure 3.1.3 illustrates the breakdown of all mobile subscriptions between pre-paid and post-paid subscribers. The proportion of pre-paid subscribers has remained relatively stable over the last two years and constant since the last quarter. Figure 3.1.4 shows the breakdown of customers by operator between post-paid and pre-paid subscriptions. Both Vodafone and O2's pre-paid / post-paid splits remain the same as last quarter. While Meteor's customer base remains predominantly within the pre-paid segment, it has continued to target post-paid business and the share of its post-paid customer base has increased from 5% to 6% in the last quarter.

Figure 3.1.4 – Number of Subscribers (Pre-Paid/Post Paid) – by Operator



Source: Quarterly Key Data Questionnaire

3.2 Market Shares

Figures 3.2.1 and 3.2.2 illustrate each operator's share of the mobile market by subscriber figures and revenues respectively. Following its focused marketing campaign for post-paid subscribers and having increased its post-paid customer base, Meteor's market share in terms of subscribers and revenues has increased in this quarter. In its Q3 2005 results, eircom reported that subscriber figures for Meteor had increased by 100,000 in the 3 months to the end of December 2005. Additionally, eircom reported higher ARPUs for Meteor as post-paid subscribers improved the customer mix.

Figure 3.2.1 – Market Share – Number of Subscribers

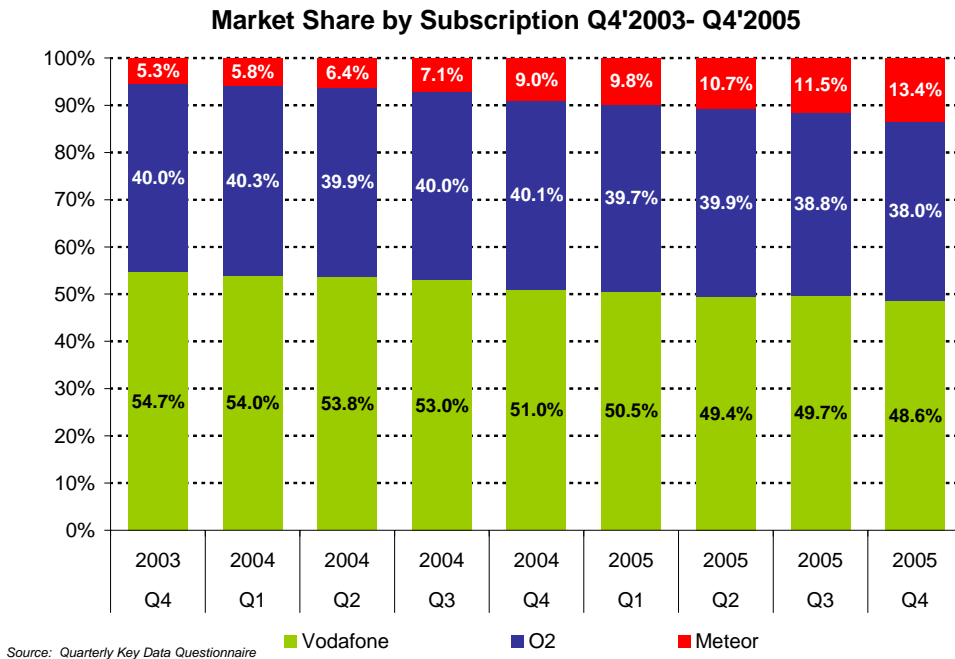
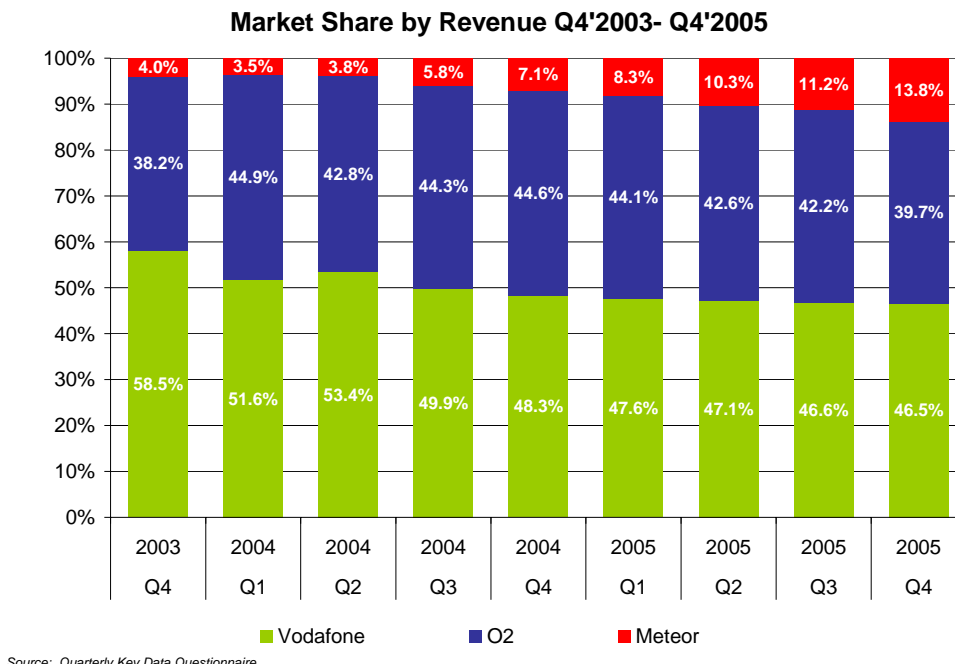


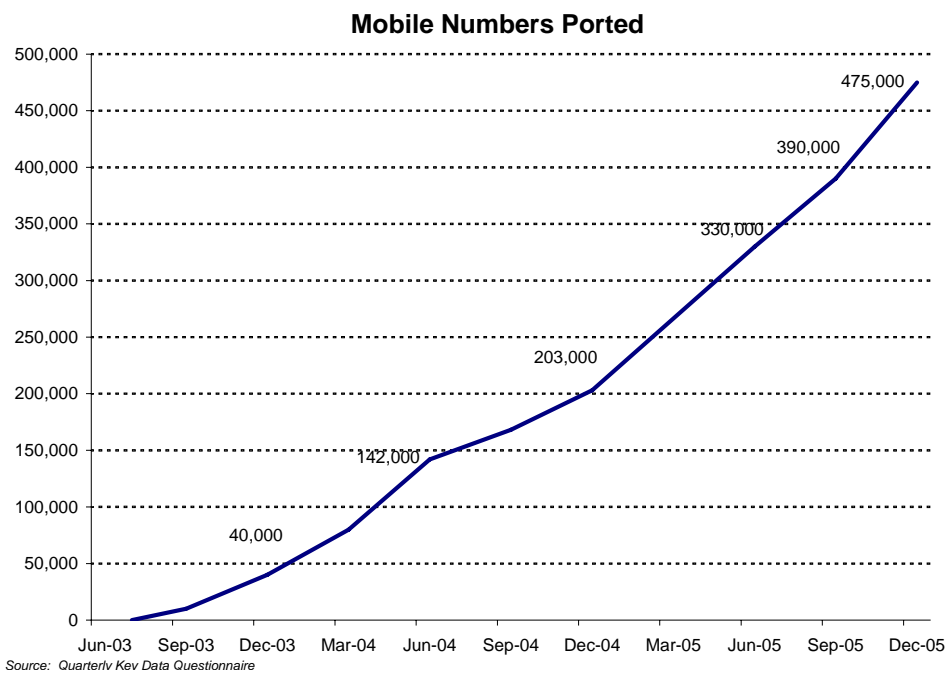
Figure 3.2.2 – Market Share – Revenue



3.3 Competitive Activity in the Mobile Market

Figure 3.3.1 outlines the growth in the use of MNP (mobile number portability) in the Irish market since its launch in June 2003. Mobile number portability allows mobile subscribers to switch mobile operator while retaining their mobile number. By the end of Q4,05 around 475,000 numbers had been ported, an increase of around 85,000 in the quarter. In line with the increase in Meteor’s subscriber base, these figures suggest a growing number of subscribers porting to Meteor.

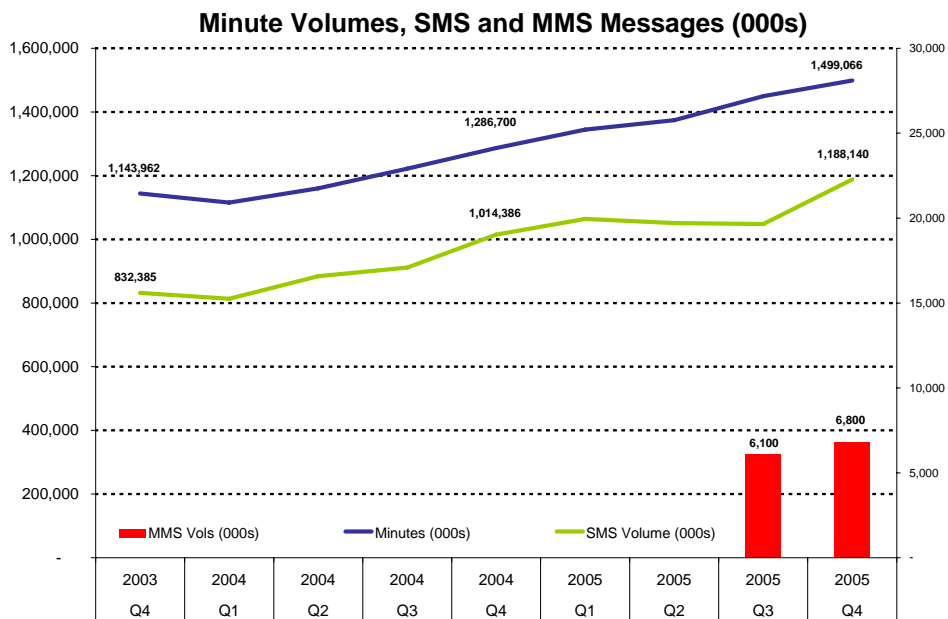
Figure 3.3.1 – Mobile Numbers Ported



3.4 SMS Services and Call Minutes

Figure 3.4.1 illustrates the growth in both call minutes, SMS and MMS (Multimedia Messaging Service) messages sent since Q4 2003. There is continued growth in the number of call minutes, with a 16.5% increase year on year. The number of SMS messages increased sharply with over 13% more messages being sent in Q4 as compared with Q3,05. The pronounced increase in this quarter is likely to be due to increased text messaging over the Christmas period. The number of MMS messages also saw growth with 6.8 million messages sent in the quarter.

Figure 3.4.1 –SMS, MMS and Call Minutes

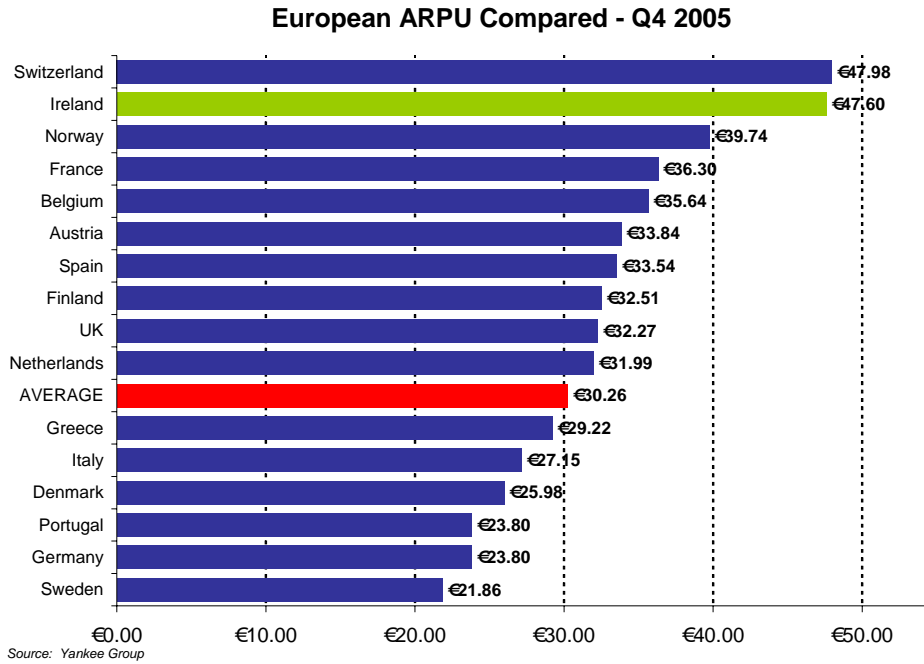


Source: Quarterly Key Data Questionnaire

3.5 ARPU

Figure 3.5.1 compares ARPU (average revenue per user) across several EU countries. In Q4,05 Irish mobile operators' ARPU was estimated at €47.60 per month, the highest among the countries monitored, and substantially higher than the EU average of €30.26.²⁵

Figure 3.5.1 European ARPU Compared – Q4 2005



²⁵ As far as possible, ARPU figures are obtained directly from operators. Where unavailable, ARPU is calculated by dividing annual service revenues by the mid-term installed base (the sum of the opening and closing customer bases for the period divided by two). Once the Yankee Group has obtained or calculated all individual ARPU figures, they are applied to each operator's mid-term user base to obtain service revenues by operator, which are then combined to obtain a country total. This total revenue figure is then divided by total mid-term users to derive country-level ARPU.

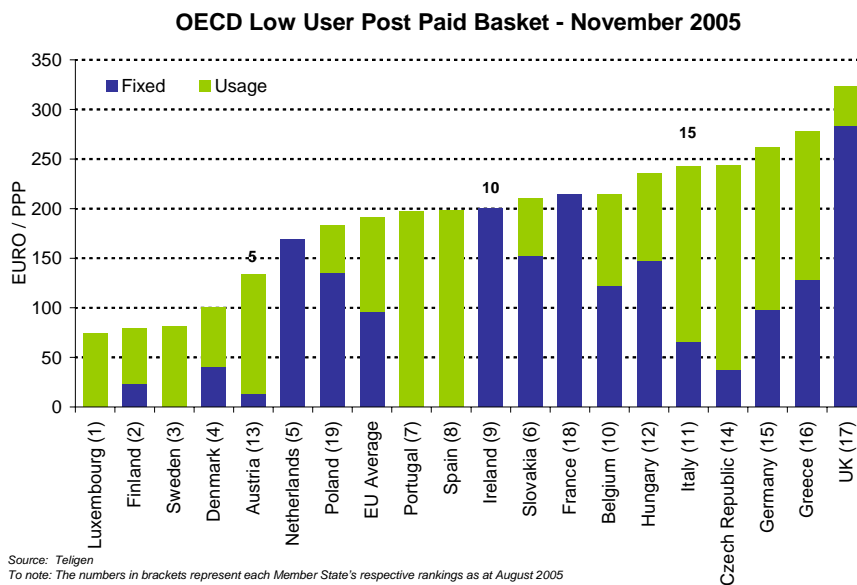
3.6 Mobile Pricing Data²⁶

While all mobile post-paid tariff baskets analysed below are currently based on typical 2G services as approved by the OECD, ComReg recognises that there may be other competitive packages available with 3G handsets.

3.6.1 Low User Post Paid Mobile Basket²⁷

In November Ireland was ranked 10th among the 19 EU markets analysed, and three places behind the EU average in terms of price.

Figure 3.6.1 OECD Low User Post Paid Mobile Basket – November 2005²⁸



²⁶ The 'Fixed' component of price refers to the standard charges imposed by operators, regardless of the amount of calls made (i.e. connection and rental). T-basket calculation of this figure is made up of: Installation Charge/5 + Rental charge for 1 year. The 'Usage' component of price refers to the charges imposed by operators, arising from the number of calls made by the user.

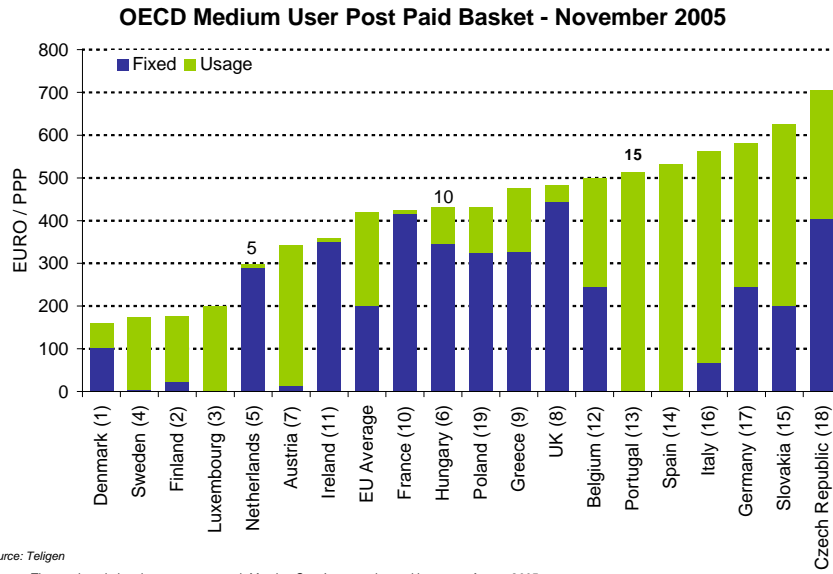
²⁷ All tariffs are inclusive of VAT, rates will vary between Member States

²⁸ ComReg are restating the mobile basket data based on an error in the mobile low-user post-paid and the medium-user baskets as published in the Q3 2005 quarterly report, published in December 2005.

3.6.2 Medium User Post Paid Mobile Basket

Ireland's position in this basket moved from 11th to 7th ranking among the 19 EU countries analysed, moving Ireland to a place in front of the EU average. The improvement in this basket is based on new tariff packages launched by 02 in late 2005.

Figure 3.6.2 OECD Medium User Post Paid Mobile Basket – November 2005²⁹



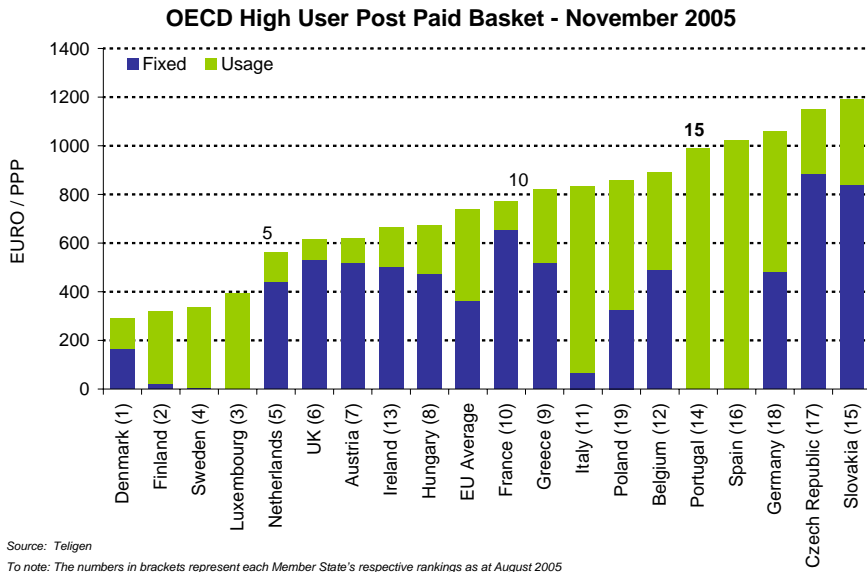
Source: Teligen
 To note: The numbers in brackets represent each Member State's respective rankings as at August 2005

²⁹ ComReg are restating the mobile basket data based on an error in the mobile low-user post-paid and the medium-user baskets as published in the Q3 2005 quarterly report, published in December 2005.

3.6.3 High User Post Paid Mobile Basket

Ireland's position has improved since August when it was ranked 13th of the 19 EU countries analysed. In November Ireland was ranked 8th, and is two places better than the EU average in terms of price. The improvement in this basket is based on new tariff packages launched by O2 in late 2005.

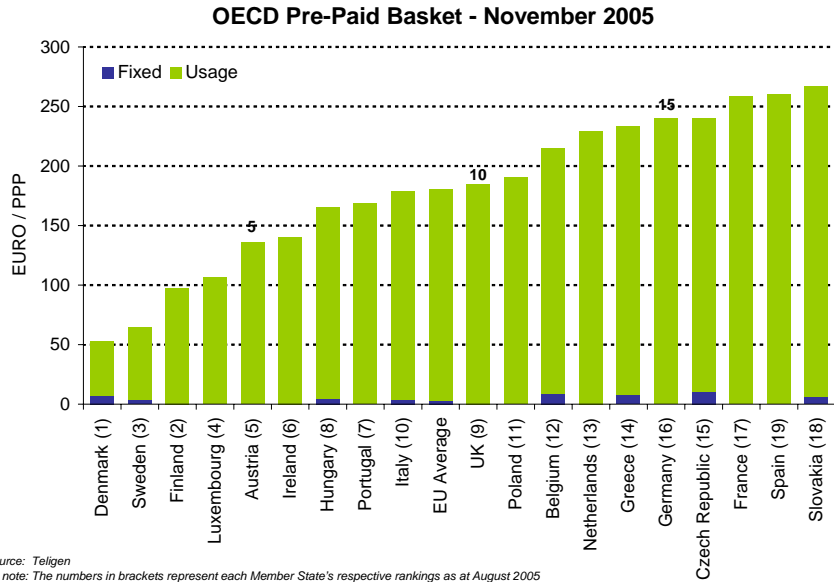
Figure 3.6.3 OECD High User Post Paid Mobile Basket – November 2005



3.6.4 Pre-Paid Mobile Basket³⁰

Ireland remained ranked 6th in the pre-paid basket, four places better than the EU average in terms of price among the 19 EU countries analysed.

Figure 3.6.4 OECD Pre-Paid Mobile Basket – November 2005



³⁰ The OECD has found that there is little difference between the average pre-paid usage and low-user post-paid usage. Thus, the pre-paid and low user post paid baskets are based on the same usage.

4 Broadcasting

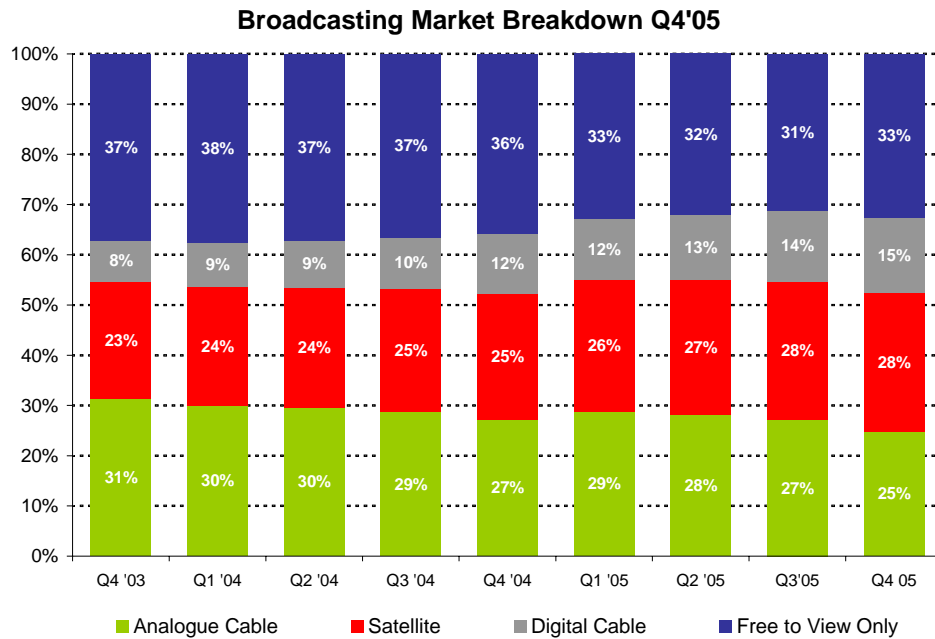
4.1 Cable/MMDS & Satellite

The broadcasting analysis provided in this report uses broadcasting operator data in conjunction with CSO estimates of the total number of TV households in Ireland. This is particularly relevant in calculating the number of households who only use a free-to-air television service. Until this quarter, ComReg has used a CSO estimate on the number of TV households of 1.35 million. The publication of the CSO Information Society and Telecommunications report in February 2006, suggests the total number of households with a television in 2005 was 1.43 million. In light of this, ComReg's analysis of the total market breakdown and penetration data for the broadcasting market is now based on this revised data. In percentage terms it appears that the number of Pay TV subscribers has decreased, but there was an actual increase of 32,000 Pay TV subscribers at the end of Q4, 2005.

At the end of the 4th quarter of 2005, there were approximately 568,500 subscribers to cable/MMDS television services in Ireland. The cable/MMDS market has seen a migration of customers from analogue to digital subscriptions, with digital subscribers now representing 38% of cable/MMDS subscribers. In December 2005, BSkyB had 393,000 Irish subscribers, a 6% increase in subscriptions for the quarter, and a 16% increase in subscriptions year on year³¹. The total number of pay TV subscribers in Ireland (cable/MMDS and satellite) stood at almost 961,500 – 63% of all pay-TV subscribers now subscribe to digital TV.

³¹ This is based on public announcements by Sky

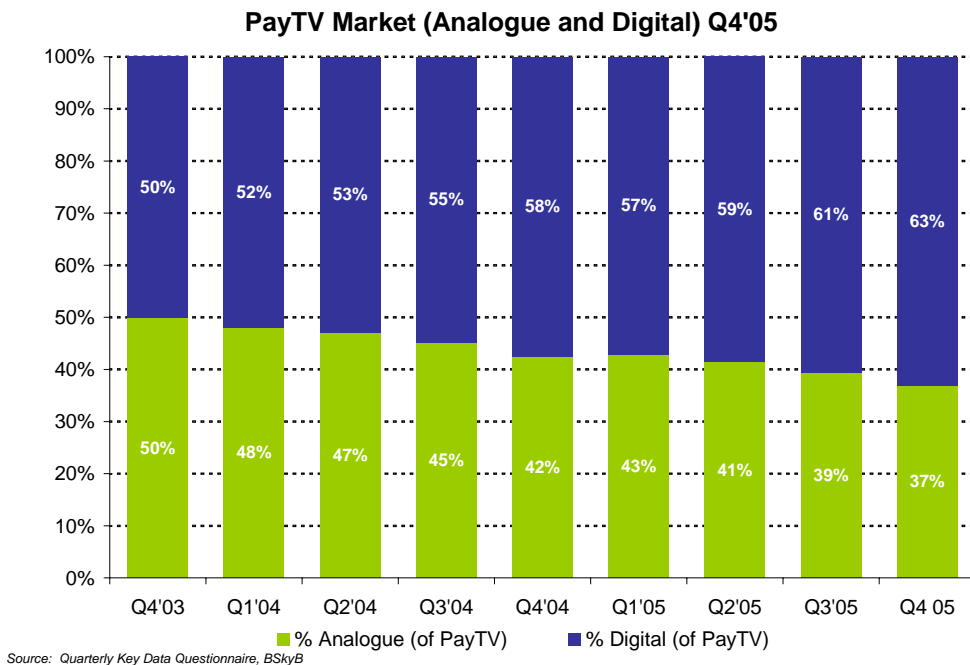
Figure 4.1.1 Take Up of Broadcasting Services³²



Source: Quarterly Key Data Questionnaire, BSkyB

At the end of quarter 4, 2005 there were approximately 607,000 digital TV subscribers which include cable/MMDS and satellite customers. Digital households now represent approximately 43% of all households with a television³³.

Figure 4.1.2 Pay TV Market (Analogue and Digital)



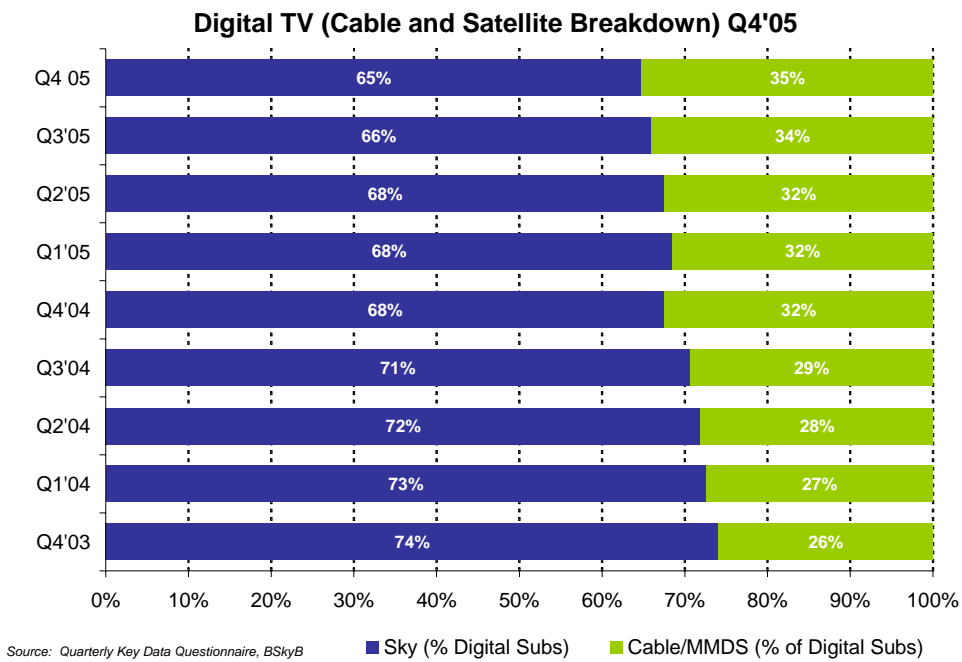
³² The market breakdown assumes the total number of TV households to be 1.427 million based on latest CSO estimates. In previous quarters, a TV household base of 1.35 million was assumed

³³ Figure is based on CSO estimate of 1.427 million households with a television.

Figure 4.1.2 examines the pay TV market in Ireland, and suggests a steady migration from analogue to digital services among pay TV customers. In quarter 4, 2005, 63% of all Pay TV services were delivered via digital.

Figure 4.1.3 examines the digital TV market, and in particular the split between digital cable/MMDS services and satellite. Digital cable offerings now account for 35% of digital TV subscriptions, representing a steady growth trend in cable's proportion of the digital TV market.

Figure 4.1.3 Digital TV (Cable and Satellite Breakdown)



5 Emerging Trends

5.1 Fixed Wireless Access

5.1.1 *What is Fixed Wireless Access?*

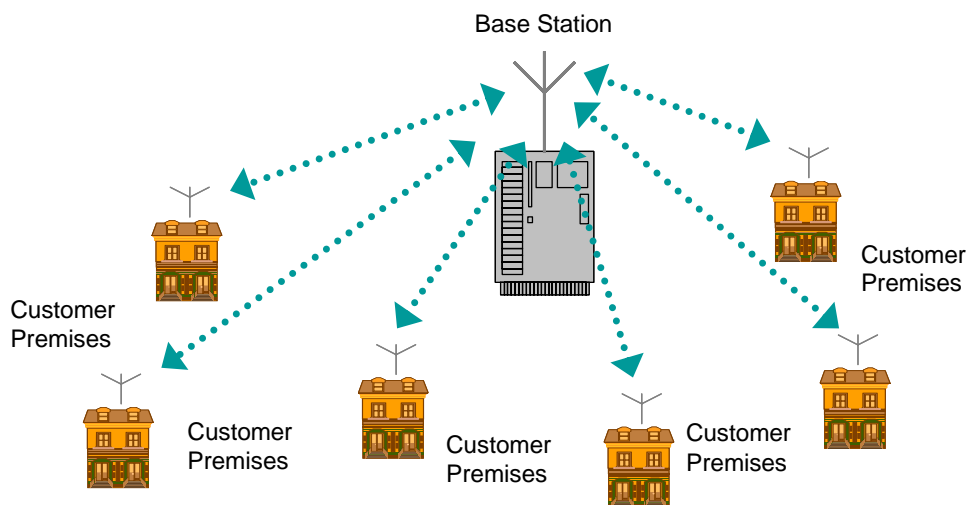
Fixed wireless access (FWA) is a way of connecting a subscriber to an electronic communications network (e.g. for broadband Internet or telephone services) using a wireless alternative to traditional copper cables. The idea came to the fore in the 1990s with growing interest in alternative technologies to help bring about further competition in telecommunications markets. With FWA, the installation cost and time of network rollout compared with laying cables are dramatically reduced. FWA can deliver a complete range of services, including telephony, high speed data (e.g. broadband), video and other multimedia services.

The greatest opportunity for FWA is in answering the current demand for broadband connectivity to the Internet and other interactive services. While FWA was traditionally seen as a technology for deployment in rural areas in which other delivery platforms such as cable and DSL were commercially or technologically unsuitable, and while it does have advantages in lower density areas, it is also a valuable asset in promoting competitive supply of services in highly concentrated urban areas.

5.1.2 *How does it work?*

To access broadband via wireless technology, a service provider will usually install an antenna on the outside of the customer's premises which is connected to a special modem that the user connects to their computer, or provides the customer with a wireless modem that can operate from indoors (i.e. no need for an external antenna). Connection from the customer's premises to the network is established by means of radio waves between a base station and the customer's wireless modem (similar to a mobile phone network). A single base station can provide service to several hundred customers, at data rates typically ranging from several hundred Kbit/s to several Mbit/s, depending on their broadband requirements and the type of technology deployed.

Wireless broadband is now available in a number of Irish towns and is becoming more available as service providers expand their networks. To get wireless broadband the customer needs to be within the coverage area of a service provider with a clear signal from a local base station. However, new technologies are developing which enable the customer to receive services based on "near line of sight".

Figure 5.1.1 FWA: How it works

5.1.3 Advantages and limitations

Advantages of FWA

- The principal advantage of FWA services is that they can be offered almost immediately to any customer within the coverage areas (2 – 20km) of the network operator's transmitters.
- The equipment used by the customer to access FWA services is quick and easy to install
- The radio frequencies can be re-used and new base stations can be quickly installed to meet growing demand
- It is an affordable solution from an operator and consumer perspective

Limitations of FWA

- The biggest limitation is that a customer would need a clear signal between their wireless modem and the network operator's base station
- Because of the nature of wireless transmission the quality of signal and speed of service decreases the further away from the base station a user is located

5.1.4 FWALA initiative

Under ComReg's Fixed Wireless Local Area (FWALA) licensing scheme, local area licences were awarded on foot of licence competitions. After the initial licensing phase in 2003 applications were evaluated on a first come, first served basis with a finite number of licences available in each area. The FWALA licence is issued to a service provider for a

central base station which will control the FWA network, and for the radio equipment required to link to the customers' premises. Each licensed base station may be used to provide broadband services to consumers in the geographic areas immediately surrounding the licensed base station and may extend up to the maximum of 15km from the location of the licensed base station.

There are now 11 companies in Ireland licenced to offer broadband services via FWA and by the end of Q4 2005 there were 40,000 FWA subscribers in Ireland.

5.1.5 Further Developments

FWA is likely to continue to increase its role as an important alternative form of broadband access in Ireland. New technologies such as Wi-Max are emerging which can increase the potential of FWA systems (e.g. with higher data rates, greater distances, or lower cost), and technologies are also emerging which could add a portable dimension to FWA.

For further information on Fixed Wireless Access please visit the following page on our website: <http://www.comreg.ie/FWABroadband/FWABroadband.asp>