Commission for Communications Regulation

Irish Communications Market

Quarterly Key Data Report

March 2007

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1. pg 13: figure 2.2.1 (fixed access paths in Q2 2006) amended based on ComReg amendment of data
2. pg 14: figure 2.3.1 (percentage of advanced minutes for Q4 2005) amended based on revised data received from market operators

LEGAL DISCLAIMER

1   Overall Market Data

Data presented in this report is based on returns from authorised operators for the period from 1st September to 31st December 2006. The report is based on submissions from 66 operators, which represents almost all authorised operator market activity.

1.1   Number of Authorisations

Figure 1.1.1 - Total Number of Authorisations

Total Authorisations	Dec 2006
No. of fixed and wireless authorisations	286
No. of mobile telephony authorisations	4
No. of broadcasting authorisations (incl. Cable TV, MMDS, Deflectors)	45
Total Number	335

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 authorised operators. At the date of publication there were 335 authorised undertakings in Ireland. It should be noted that the list above refers to the number of general authorisations granted by ComReg under the European Framework for Authorisations and does not necessarily reflect the total number of commercially-active organisations or entities currently operating in the market. The total number includes a number of undertakings who are authorised to use license-exempt spectrum for the provision of services.

A decrease in the number of reported authorised operators since the September 2006 report is a result of an ongoing internal audit of all operators who have notified ComReg of their intention to provide services to the Irish market. The audit has resulted in the removal from the register of a number of authorised operators who may have withdrawn from the market or re-evaluated their plans to launch services.

1.2 Overall Electronic Communications Revenues[1]

Data presented in Figure 1.2.1 examines the proportion of industry revenue attributable to the provision of fixed line, mobile and cable broadcasting services.

Figure 1.2.1 – Fixed, Mobile & Broadcasting as a % of Total Revenues[2]

Share of Overall Market Value

	Q1 05	Q2 05	Q3 05	Q4 05	Q1 06	Q2 06	Q3 06	Q4 06
Broadcasting	4.1%	4.3%	4.3%	4.4%	4.3%	4.3%	4.2%	4.1%
Mobile	46.8%	45.7%	46.9%	47.0%	44.9%	45.2%	44.1%	45.5%
Fixed	49.1%	50.0%	48.9%	48.6%	50.8%	50.6%	51.7%	50.4%

■ Fixed　■ Mobile　■ Broadcasting

Source: Quarterly Key Data Questionnaire
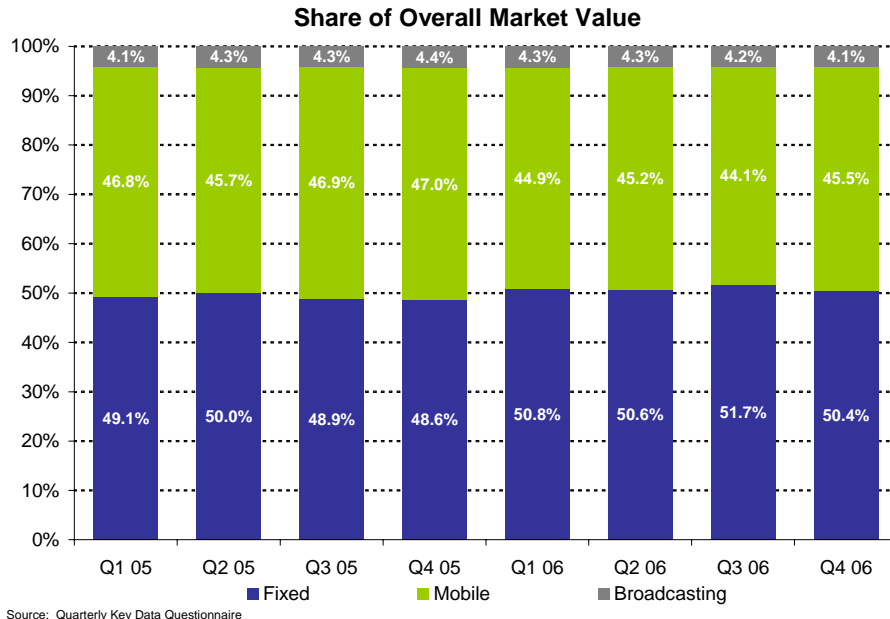
Overall electronic communications network and service revenues at the end of December 2006 were €1.1bn for the quarter, or €4.28bn annual revenues for 2006. Quarterly industry revenue increased by 2.25% in the quarter and by 12% compared to Q4 2005. Increased industry revenue this quarter is driven principally by growth in the mobile industry, while overall annual increases are a result of revenue gains across the whole industry and increased compliance by operators providing data to ComReg.

In Q4 2006 fixed line revenues accounted for 50.4% of electronic communications revenues, a 1.3% percentage decrease fixed line share of industry revenue since last quarter[3]. In contrast the mobile industry increased its share of industry revenue from 44.1% in Q3 2006 to 45.5% in Q4 2006.

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[1] For further detail on terms and definitions see ComReg Document Number 06/52a 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 including PPC revenue as well as other revenues ((including web-hosting, co-location services, directory publication & other services)) broadband), **mobile** (connection, voice and data services, roaming) and **broadcasting** (including cable/MMDS broadcasting services, connection, rental and other charges).

[3] ComReg has changed it methodology for the calculation of broadband revenues, which has had an impact on the total fixed line revenue reported, and the proportion of industry revenue generated from fixed line services in Figure 1.2.1. Had the former methodology been used, the fixed line revenue proportion of industry revenue would have been 50.5%, a decrease of 1.2% in proportion of industry revenue.

1.3 Overall Call Volumes

Figure 1.3.1 - Share of Total Voice Call Volumes (Minutes)

Overall Call Volume

Source: Quarterly Key Data Questionnaire
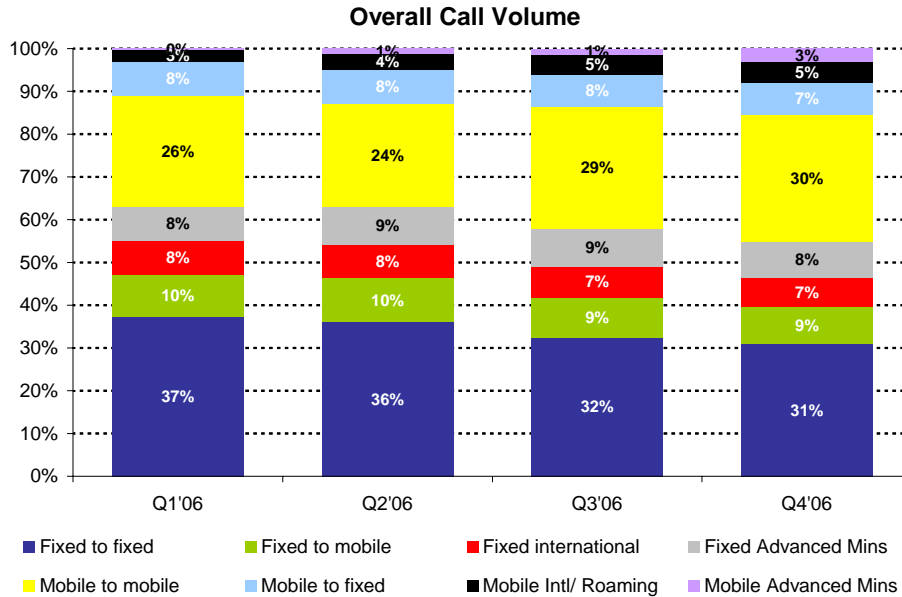
Figure 1.3.1 profiles volumes of voice calls by call type for both fixed and mobile voice on a quarterly basis.

Voice minutes in the Irish market totalled 4.43 billion minutes, a 4% increase in voice call minutes on the previous quarter when total voice minutes were 4.26 billion minutes. A methodological change in ComReg's calculation of mobile advanced minutes in Q4 2006 has resulted in an increase in the proportion of traffic in this category[4]. Traffic originating on a fixed line network accounts for 57% of all voice minutes, while mobile originating voice minutes account for the remaining 43%.

1.4 Pricing Overview

This section examines Ireland's current and previous rankings based on prices in various consumer baskets against other EU countries. Data on PSTN[5] and mobile basket prices is provided to ComReg by Teligen who use an OECD-approved methodology to compare fixed (PSTN) and mobile tariffs.

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[4] Should the methodology for advanced mobile minutes have remained the same as previous quarters, advanced mobile minutes would have accounted for 1% of total voice minutes, and total voice minutes would have increased by 1% between Q3 2006 and Q4 2006.

[5] The PSTN refers to a public switched telephone network or copper telephony network, on which calls can be made. A PSTN line is more commonly known as a copper telephone line.

This format follows a basic three-step process consisting of:

(i)   the construction of one or more baskets of telephone services;

(ii)   the pricing of those baskets; and

(iii)   the conversion of the individual currencies to standard units (i.e. US Dollars or euros and Purchasing Power Parities (PPPs)).

Countries are then ranked based on PPPs, with the least expensive country ranked 1st.

The charts presented in this section provide an overview of Ireland's ranking relative to other EU member states since the revision of the OECD baskets since February 2006. Individual pricing charts for each basket for November 2006 are analysed under the heading "Pricing Data" in the specific mobile and fixed sections of this document. Ireland's position is ranked in relation to other EU member states.

For further information on Teligen's methodology please see the accompanying memorandum ComReg 07/17a.

1.4.1   PSTN Baskets

Figure 1.4.1 shows the movement in Ireland's position relative to other EU countries in all PSTN baskets since February 2006, where the least expensive country based on the methodology is ranked 1st. Ireland remains less expensive than the average basket cost across all of the PSTN services analysed. This quarter the international call basket for both business and residential services shifted favourably to a lower ranked position to 3rd and 2nd ranked place respectively. The national residential basket dropped one rank place from 8th to 9th out of the 19 EU countries monitored.

Figure 1.4.1 – Ireland's Position in the Various PSTN Baskets

**Ireland's Position in the Various PSTN Baskets Relative to EU19:
Feb '06 - Nov '06**

Source: Teligen   Nat. Residential   Nat. Business   Int'l Residential   Int'l Business
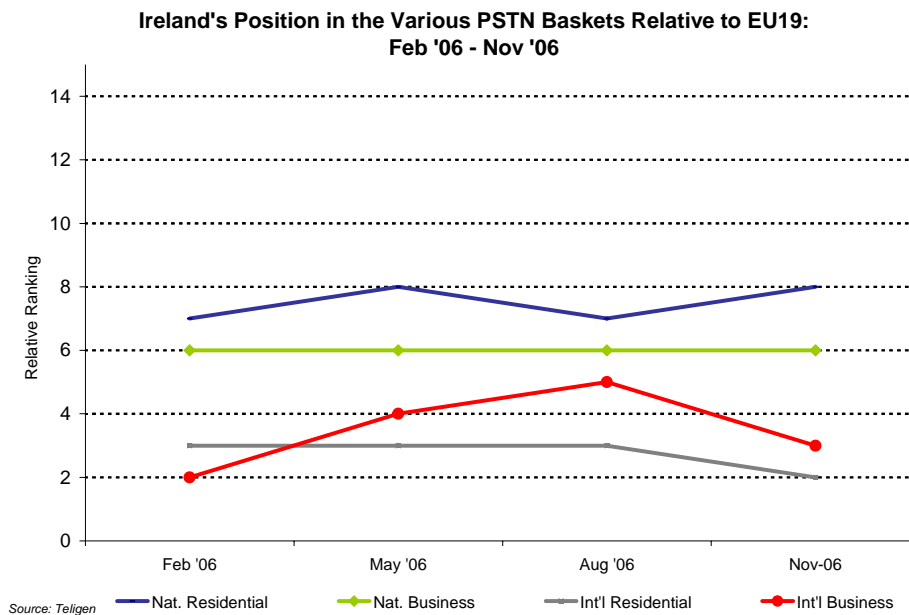
1.4.2   Mobile Baskets

Figure 1.4.2 shows the movement in Ireland's position relative to the EU in all mobile baskets since February 2006, where the least expensive country based on the methodology is ranked 1st. The pre-paid basket has improved three places this quarter, and is currently ranked 8th. There has been no movement during the quarter in the ranking of the lower user baskets, while the medium and high user post-paid baskets have fallen one rank from 7th to 8th place among the 19 EU-member states analysed.

Figure 1.4.2 – Ireland's Position in Various Mobile Baskets

**Ireland's Position in the Various Mobile Baskets Relative to EU19:
Feb '06 - Nov '06**

Source: Teligen   Low User- (post paid)   Medium User (post paid)   High User (post paid)   Pre-paid
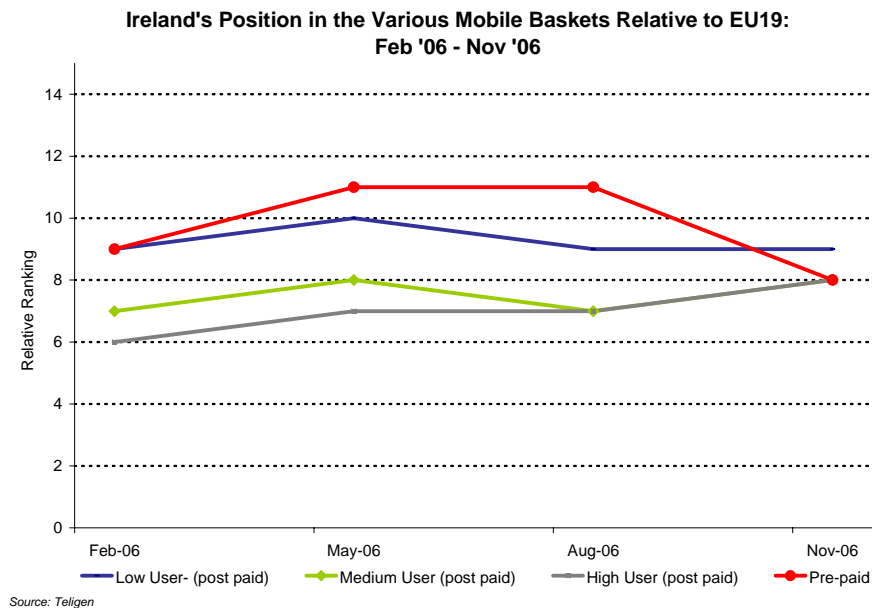
2 Fixed Market Data

2.1 Total Fixed Line Revenues

Fixed line revenues totalled €556 million in Q4 2006[6]. ComReg has changed its methodology with regard to the calculation of broadband revenues for this quarter. Broadband revenues reported this quarter, and in future reports will reflect retail revenues only from broadband services. As a result of this change in methodology, while overall fixed line revenues appear to have marginally dropped this quarter, this is as a result of the revised methodology rather than a real fall in overall fixed line revenues. Indeed, if the previous methodology for the calculation of fixed line revenue had been used total revenues would have remained stable for this quarter. Overall, ComReg is reviewing the reporting of retail and wholesale revenue data with a view to reporting separately on wholesale and retail revenues. Figure 2.1.1 below is broken down by retail revenues (from retail narrowband services, broadband services, and leased lines, managed data and other advanced data services) and wholesale revenues (from interconnect services).

Figure 2.1.1 – Fixed Line Revenues[7]

Fixed Line Revenues Q4 '04 - Q4 '06

Source: Quarterly Key Data Questionnaire

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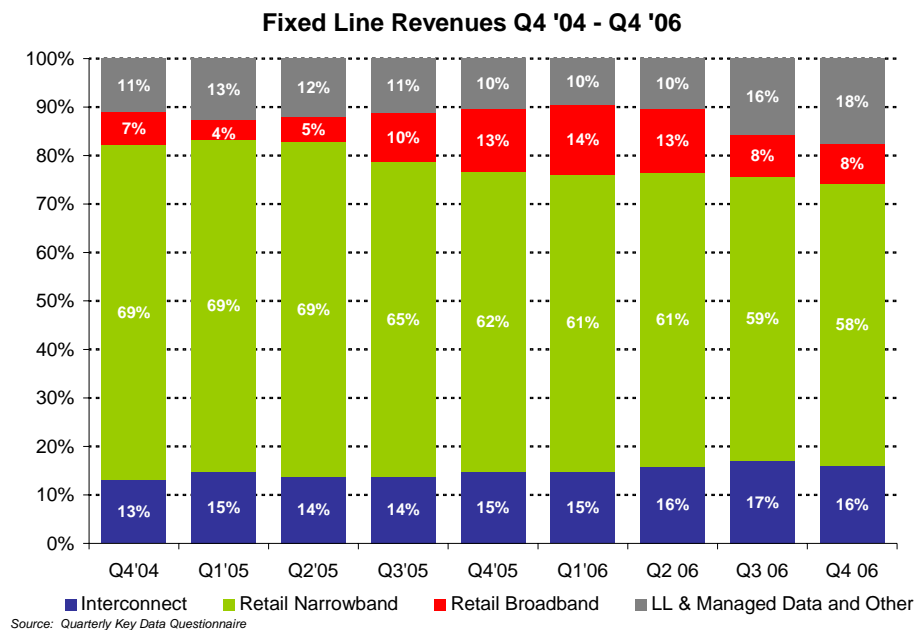
[6] Please note that Chorus were unable to provide ComReg with revenues attributable to their fixed voice services for the Q4 2006.

[7] Since Q3 2006 "Other Revenues" were included in the Broadband revenue category. Since Q3 2006, "Other Revenues" are included along with Leased Lines and Managed Data revenue. Other revenues included Packet Switch services revenue, ATM, Frame, other IP data revenues

2.1.1   Authorised Operators' Share of Overall Fixed Line Revenues

Figure 2.1.2 shows 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 grouped within a number of revenue categories to link related services; however this classification does not reflect the specific markets identified in ComReg's Market Review process. *eircom*'s overall share of fixed line market revenue has decreased again this quarter from 72% in Q3 2006 to 71% in Q4 2006.

Market share data presented here reflects the changes made the calculation of broadband revenues this quarter as outlined in Figure 2.1.1.   The change in methodology is a contributory factor to a change in *eircom*'s overall fixed line revenue market share, in particular its share of the broadband revenue segment.   Using the former methodology on Q4 2006 data, eircom's market share in this segment would be 55%. However, overall eircom market share is not changed as a result of this change in methodology.   The reported eircom market share decline is likely to be due to both increased OAO activity in the market, and an increase in compliance with the Quarterly Report questionnaire by authorised operators.

Figure 2.1.2 - Market Share of Fixed Line Revenues

Fixed Line Revenues Q4 '06

Source: *Quarterly Key Data Questionnaire*
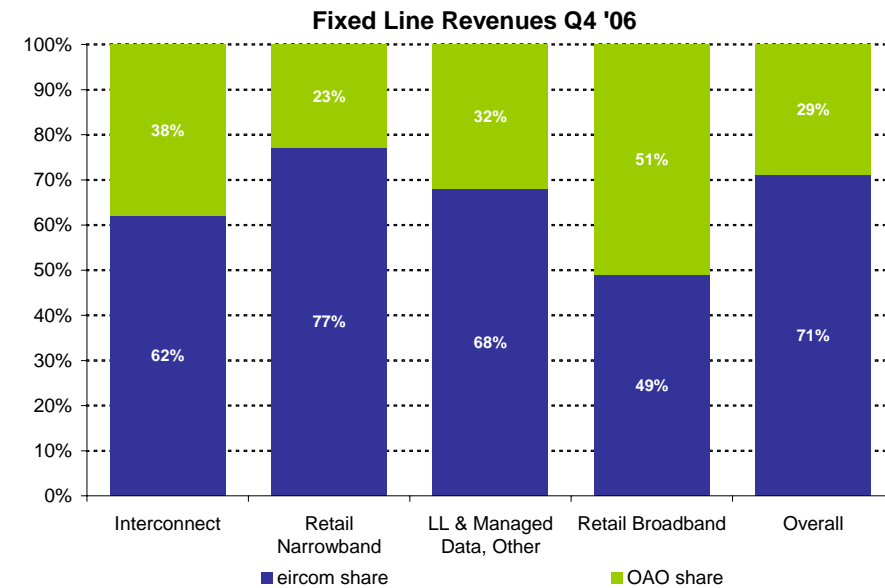
Figure 2.1.3 outlines revenue market share in the market for Q4 2006 comparing incumbent market share with the top 5 OAOs, and all other OAOs with respect to fixed line revenue. After *eircom*, the largest revenue earning operator in the market, with 71% market share, the next five largest operators in terms of revenue contribute a further 20% of industry

revenue, with the remaining 10% generated by all other operators in the fixed line market. This chart is presented here as additional analysis of the fixed market and should not be interpreted as definitive statement of market shares, in particular fixed line market segments.

Figure 2.1.3 – Revenue Market Share for Top 5 OAOs and all other market operators

Revenue Market Share of Fixed Line Operators, Q4 2006
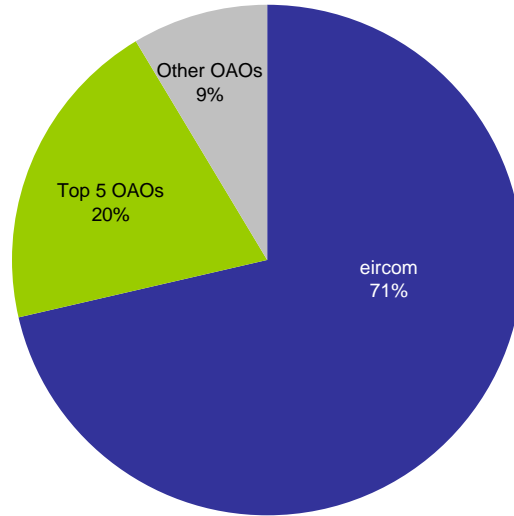
2.2 Fixed Line Access

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 access[8]. There were almost 2.1 million direct and indirect PSTN and ISDN access paths in the Irish market in Q4 2006, a marginal increase since Q3 2006. ComReg now includes direct access provided by means of Local Loop Unbundling (LLU) in direct access paths, based on the assumption that the line is directly controlled by an alternative operator. The figures from Q3 2005 onwards in Figure 2.2.1 have been revised in line with this new approach. Indirect access paths totalled nearly 474,000 in Q4 2006, a 3% decrease since Q3 2006. This decrease is primarily due to Smart Telecom's exit from the residential telephony market in October 2006. Indirect access accounts for 23% of all access paths in the fixed market.

Figure 2.2.1 - Fixed Access Paths

Direct & Indirect Narrowband Access Paths

Source: Quarterly Key Data Questionnaire

	Total Direct	Total Indirect
Q4'05	1,577,502	455,005
Q1'06	1,597,899	453,764
Q2'06	1,591,802	462,601
Q3 2006	1,595,529	489,214
Q4 2006	1,623,437	473,618
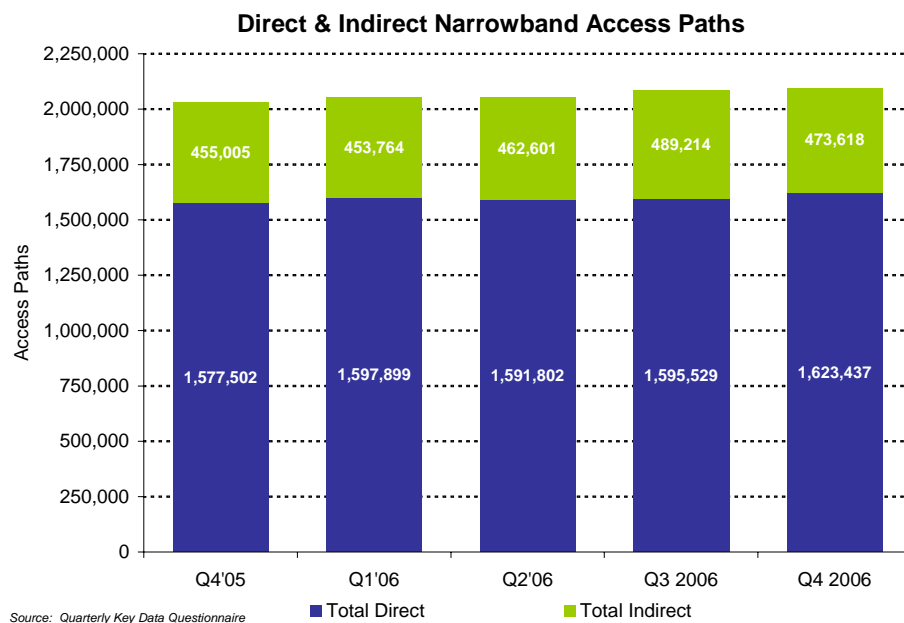
2.2.2 Indirect Access Lines

Figure 2.2.2 illustrates the overall number of PSTN and ISDN lines provided by means of either Carrier Pre-Selection (CPS) only or Wholesale Line Rental (WLR). In Q4 2006, there were almost 407,000 active lines, enabling OAOs to provide indirect services to customers. The number of indirect access lines has decreased by nearly 4% in overall terms this quarter, which as outlined above is primarily due to Smart Telecom's withdrawal from the

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[8] Indirect access paths relate to telephone lines provided to customers by means of carrier pre-select only or wholesale line rental. Carrier pre-select allows the user to receive all or a portion of calls from one provider and line rental from another provider (usually eircom). Wholesale line rental (also known as single billing) allows the user to receive every aspect of telephone service, including all calls and line rental from one single supplier.

residential telephony market in October 2006. However, there has still been annual growth in the number of indirect access lines, which have increased by 4% in the 12 months to end of December 2006. Figure 2.2.2 charts the profile of indirect access in the Irish market. This chart shows how OAOs are migrating their customer based to single-bill services, i.e. WLR rather than CPS-only (i.e. calls only) services to customers. WLR lines managed by OAOs now account for 70% of indirect access lines compared to 23% in Q4 2004.

Figure 2.2.2 - Indirect Access Lines[9]

Carrier Pre-Select and Wholesale Line Rental
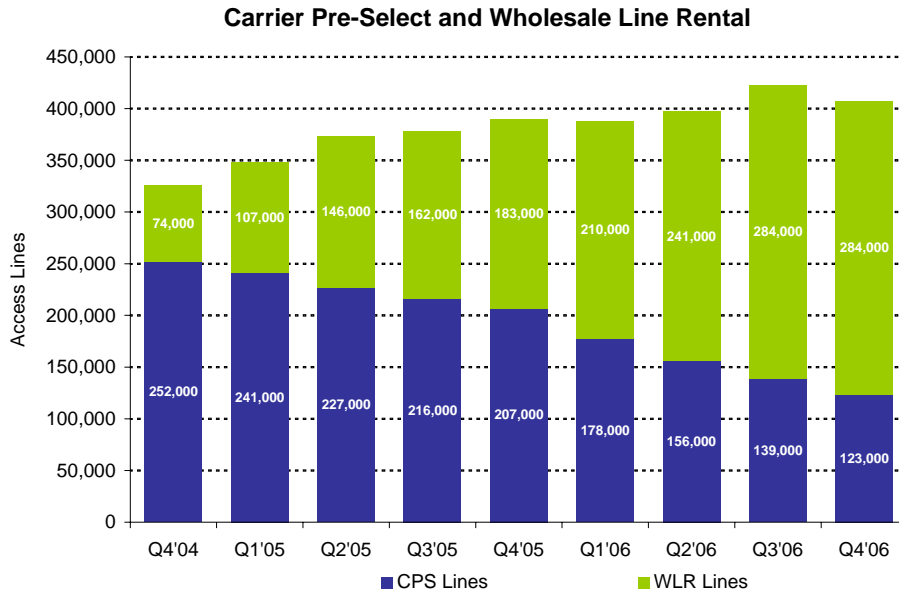
Source: Quarterly Key Data Questionnaire

2.3 Fixed Voice Call Volumes

Figure 2.3.1 below illustrates trends in fixed voice call volumes in the last two years. Fixed call traffic in Q4 2006 reached just under 2.43bn minutes[10], a 1% decrease since Q3 2006, but overall relatively unchanged since Q4 2005.

Minutes of fixed calls to mobiles category make up 16% of the fixed voice market; however volumes in this segment fell by 5% in Q4 2006. Changes in the volumes and profile of fixed line traffic continue to be monitored by ComReg for evidence of changes in fixed line usage such as fixed-mobile substitution.

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[9] Number of lines are rounded to the nearest thousand

[10] Please note that Chorus were unable to provide ComReg with fixed voice minutes for the period Q4 2006.

Figure 2.3.1 – Fixed Voice Call Volume[11]

Call Volume by Type

	Domestic Minutes	International Outgoing Minutes	Mins to Mobile	Other/ Advanced Minutes
Q4 2006	56%	13%	16%	15%
Q3 2006	56%	13%	16%	15%
Q2 2006	57%	13%	16%	14%
Q1 2006	59%	12%	16%	13%
Q4 2005	62%	12%	17%	10%
Q3 2005	61%	11%	17%	11%
Q2 2005	61%	11%	17%	11%
Q1 2005	60%	13%	16%	11%
Q4 2004	60%	12%	17%	11%

Source: Quarterly Key Data Questionnaire
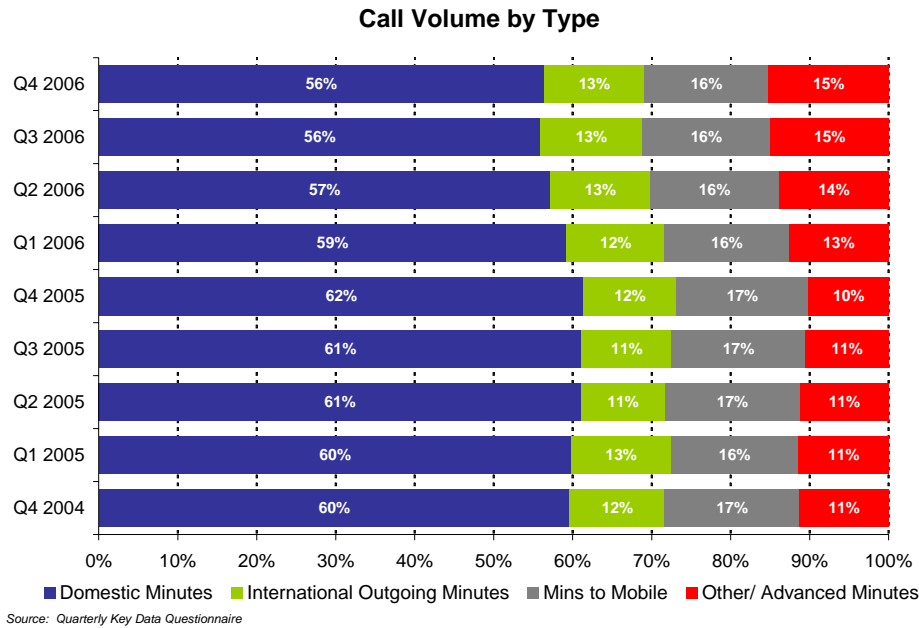
2.4 Fixed Pricing Data

ComReg presents independently collated Teligen data using an OECD-approved methodology to examine the relative costs of a number of specific baskets of national and international telecoms services for both residential and business users. The data presented includes all EU-25 countries for which data is available. Using this methodology, data is presented using USD ($) and Pricing-Power Parities (PPPs). The latter provide an indication of the cost of telecoms services in countries analysed in relation to the cost of all other products and services, and taking account of exchange rates differences.

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 fixed costs for usage over a 12 month period. This chart is based on a comparison of the cheapest package or bundle available for a specific customer usage profile and in many cases will include a fixed charge bundled service. It should therefore be noted that the "fixed" element in this basket is not an indication of the cost of basic line rental. In November 2006 Ireland was ranked at 8th position, a one place drop since August 2006, and six places better than the EU average in terms of price for this basket.

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[11] Domestic Calls include local & national calls. Advanced service and other minutes include minutes to premium rate numbers, freephone numbers, callsave, operator services, VPN minutes, payphones and other services.

Figure 2.4.1.1 - OECD National Residential Basket – November 2006[12]

OECD National Residential Basket - November '06

To note: The numbers in brackets represent each Member State's respective rankings as at August 2006
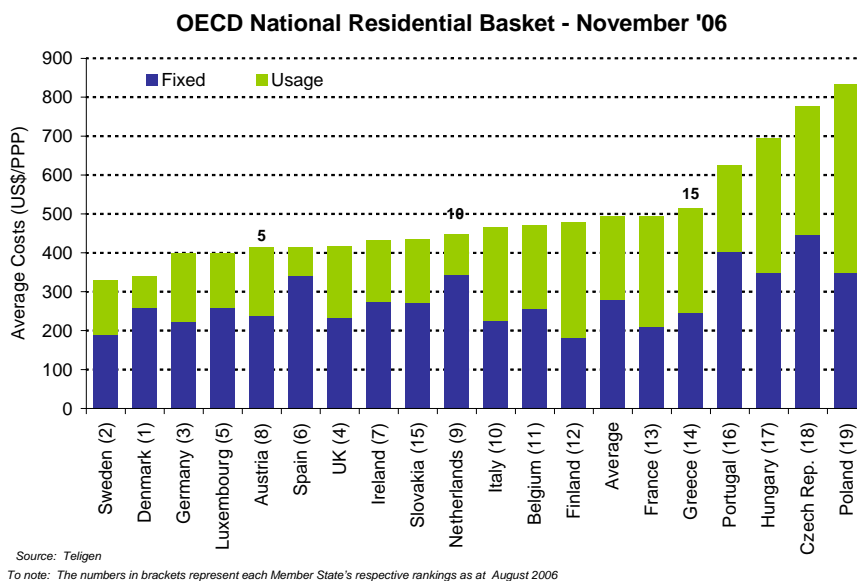
2.4.1.2 National Business Basket

As with the residential basket, this chart is based on a comparison of the cheapest package or bundle available for a set number of voice calls over a 12 month period, and in many cases will include a fixed charge for access as part of a bundled service. It should therefore be noted that the "fixed" element in this basket is not an indication of the cost of basic line rental. Ireland is placed in 6th position in the national business basket again this quarter and is six places better than the EU average in terms of price.

Figure 2.4.1.2 - OECD National Business Basket – November 2006

OECD National Business Basket - November '06

To note: The numbers in brackets represent each Member State's respective rankings at August 2006

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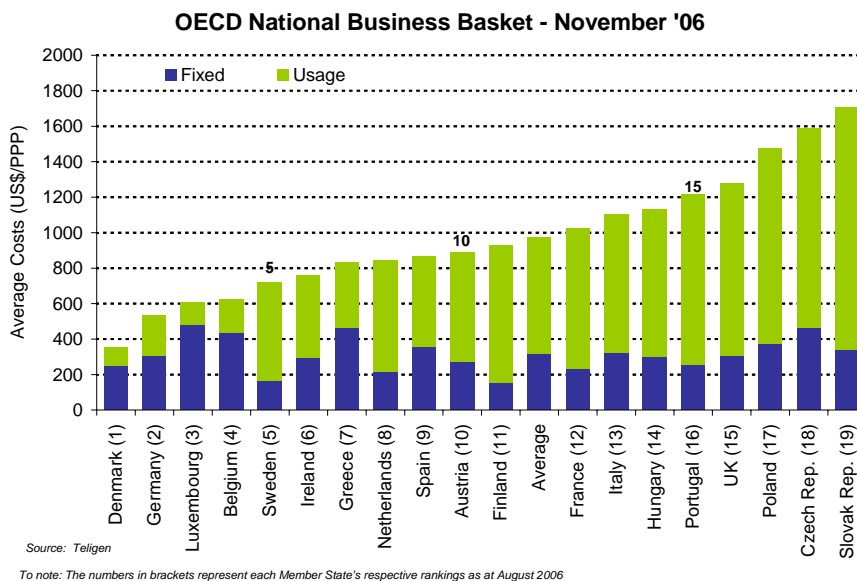
[12] Residential tariffs include VAT. VAT rates vary between member states.

2.4.2 International Residential Basket

Figure 2.4.1.3 shows that Ireland is ranked in 2nd position this quarter in terms of the cost of three-minute peak international calls and 5 minute off-peak international calls from one country to all other countries in the basket. This is a one place improvement on the previous quarter, and is now eight places better than the EU average in terms of price.

Figure 2.4.1.3 - OECD International Residential Basket – November 2006[13]

Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at August 2006
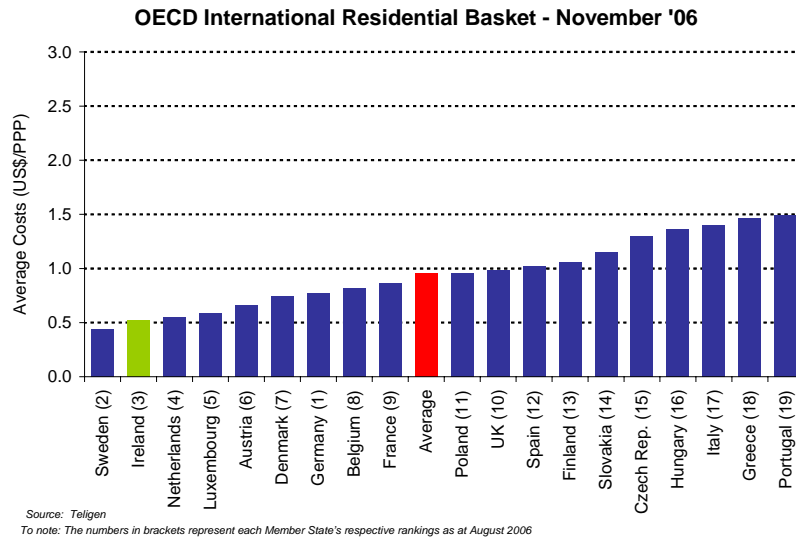
2.4.3 International Business Basket

Ireland has improved from 5th to 3rd place among EU countries analysed in the international business basket, and is 6 places ahead of the EU average in terms of price.

Figure 2.4.1.4 - OECD International Business Basket – November 2006

Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at August 2006

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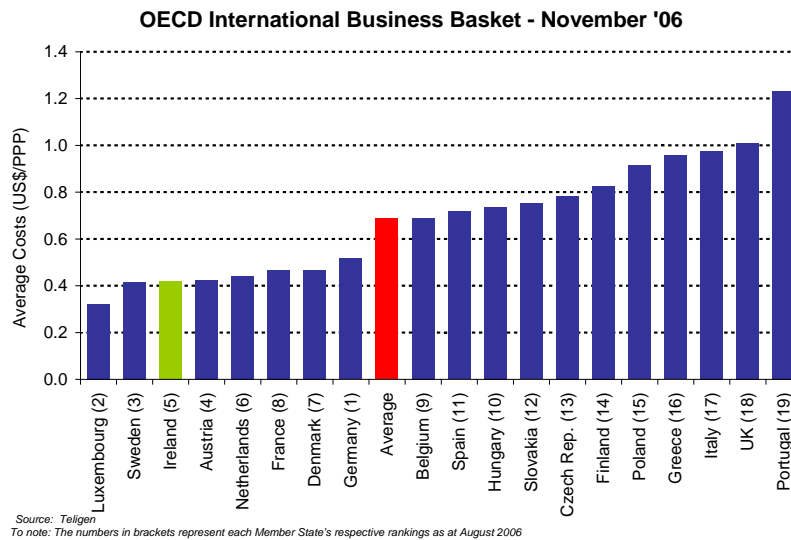
[13] Residential tariffs include VAT. VAT rates vary between member states.

2.5 Provision of Internet Services

At the end of Q4 2006, there were a total of almost 1.036 million active internet subscribers in Ireland, the first time the number of active subscriptions has exceeded 1million in the Irish market. Figure 2.5.1 outlines the total number of subscribers to internet services in Ireland including all narrowband and broadband subscriptions.

Figure 2.5.1 – Total Number of Active Internet Subscriptions in Ireland

Subscription Type	Q4 06 Subs	Quarterly Growth Q306- Q406	Year-on-Year Growth Q405- Q406
Metered Narrowband	430,500	-8%	-14%
Flat Rate Narrowband	88,000	-4%	-14%
ADSL Broadband[14]	379,100	9%	87%
Other Broadband	138,200	17%	102%
Total	**1,035,800**	**4%**	**19%**

The profile of internet subscriptions is further described in Figure 2.5.2 in terms of percentages and illustrates the continued migration from narrowband to broadband access since 2004. In Q4 2004, broadband subscriptions accounted for 16% of all internet connections; while by the end of 2006 broadband accounted for 50% of all internet subscriptions in Ireland.

Figure 2.5.2 – Profile of Active Internet Subscribers in Ireland

Narrowband Metered, Narrowband Flat-rate, DSL and Other Broadband Subscriptions

Source: Quarterly Key Data Questionnaire

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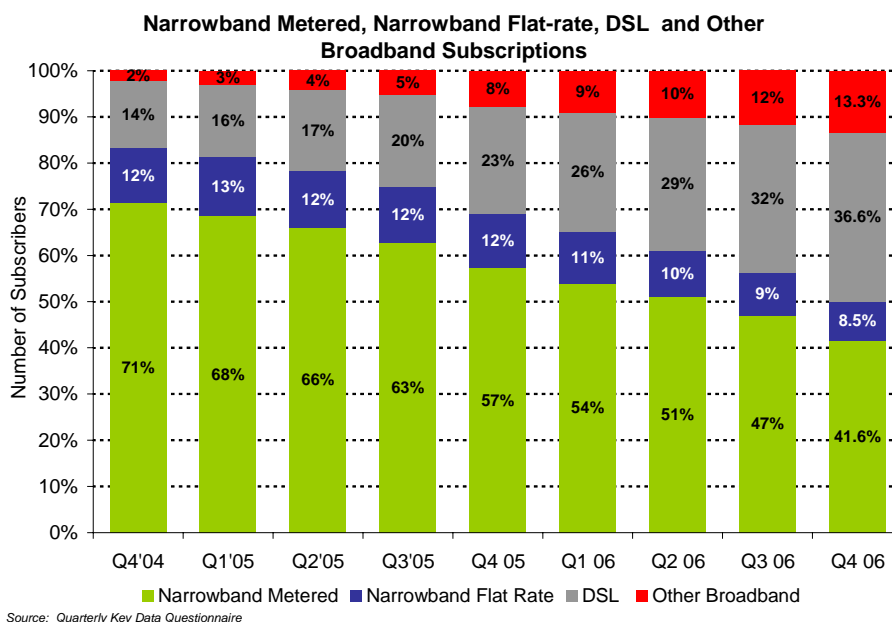
[14] DSL or ADSL refers to an asymmetric digital subscriber line, the means by which broadband speeds (i.e. in excess of 144k) are delivered over the copper telecoms network.

Figure 2.5.3 describes the market for internet subscriptions examining only those subscriptions over the copper telecoms network. It includes an analysis of metered or pay-as-you-go narrowband subscriptions, flat-rate narrowband subscriptions and DSL subscriptions. There were a total of almost 898,000 active internet subscriptions over the copper telecoms network at the end of 2006. DSL accounts for 42% of these internet subscriptions over the copper network, while metered narrowband subscriptions account for 48.2% of internet subscriptions over copper. Flat rate narrowband internet subscriptions make up the remaining 9.8% of subscriptions.

Figure 2.5.3 – Number of Copper Based Internet Subscribers

Source: Quarterly Key Data Questionnaire
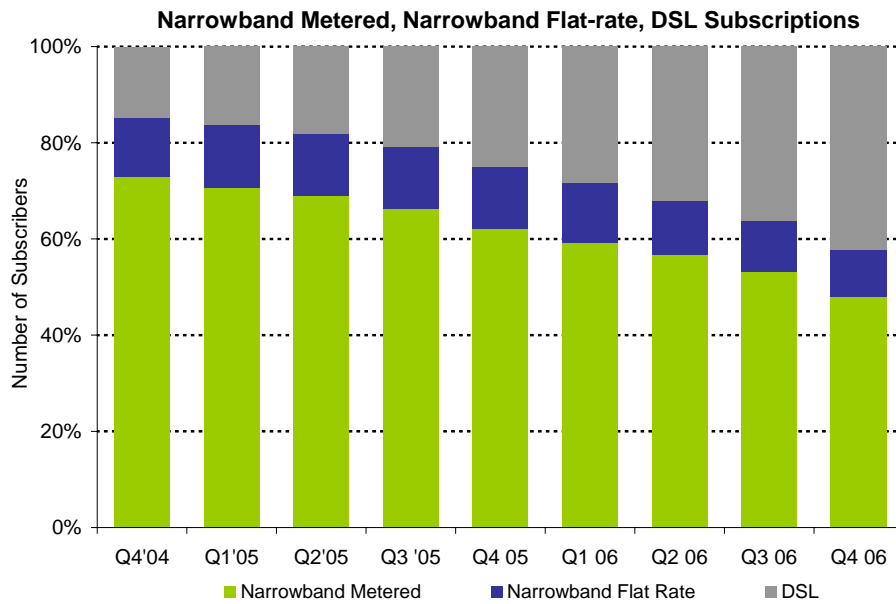
2.6 Provision of DSL Access

Figure 2.6.1 profiles direct provision of DSL by eircom in the Irish telecoms market with indirect provision of DSL by other authorised operators (OAOs) using *eircom*'s wholesale bitstream products or fully unbundled loops. Wholesale Bitstream, which enables OAOs to resell *eircom*'s DSL service, accounted for 29% of all DSL connections by the end of 2006. A further 5% of DSL lines were provided by OAOs using local-loop unbundling (LLU). At the end of December 2006 there were almost 19,500 local loops unbundled, a decline of 2% on the number of active lines unbundled in Q3 2006. The lack of robust and efficient LLU processes from eircom continues to hamper investment in what has in other markets been a key driver of innovation and broadband take-up.

Figure 2.6.1 - Provision of DSL Access

Provision of DSL Access

Source: Quarterly Key Data Questionnaire
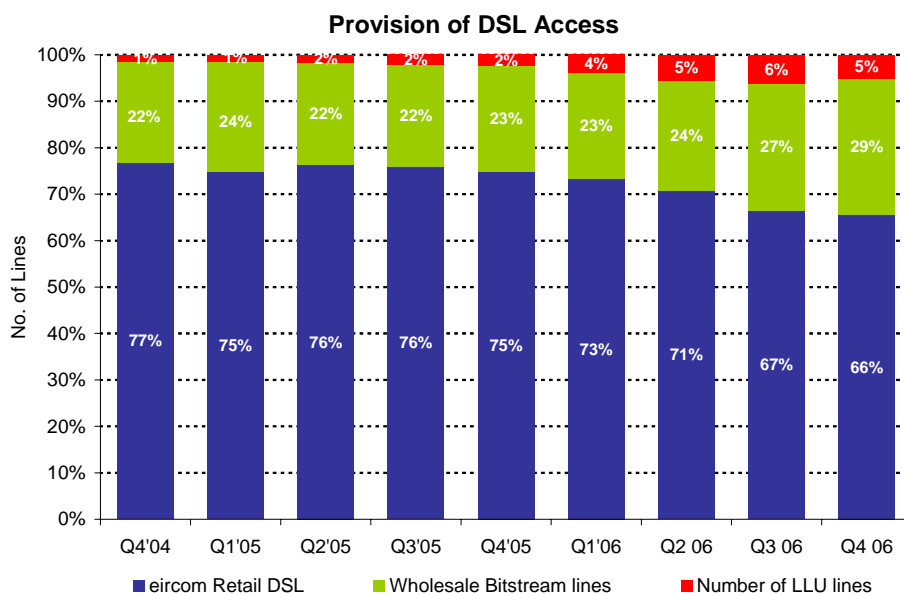
eircom currently has a 66% retail market share of DSL subscriptions in the Irish market, a 1% decline since Q3 2006, and a 9% decline in market share since Q4 2005. eircom's market share of the total broadband market is analysed in section 2.7 below.

2.7 Provision of Broadband Services

Figure 2.7.1 summarises the total number of broadband subscribers at the end of the quarter by access technology.

Figure 2.7.1 – Broadband Subscribers and growth rates by Platform

Platform	Q4 06 Subs	Quarterly Growth Q306- Q406	Year-on-Year Growth Q405- Q406
DSL	379,100	19%	87%
Cable	56,000	13%	124%
FWA	75,200	20%	88%
Other[15]	7,000	33%	108%
Total	**517,300**	**18%**	**91%**

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[15] Other Broadband includes Satellite and Fibre to the Premises broadband subscriptions

This quarter saw the highest number of new subscribers added in any single period since the launch of broadband services in Ireland, with an additional 80,600 new subscriptions added between September and December 2006. DSL remains the largest broadband access platform in terms of subscribers, accounting for 73% of all broadband subscriptions, while other platforms account for the remaining 27% of broadband connections. Figure 2.7.2 illustrates the growth in total broadband subscriptions in the Irish market since Q4 2004.

Figure 2.7.2 – Broadband Subscribers by Platform

Broadband Subscribers By Platform

Source: Quarterly Key Data Questionnaire
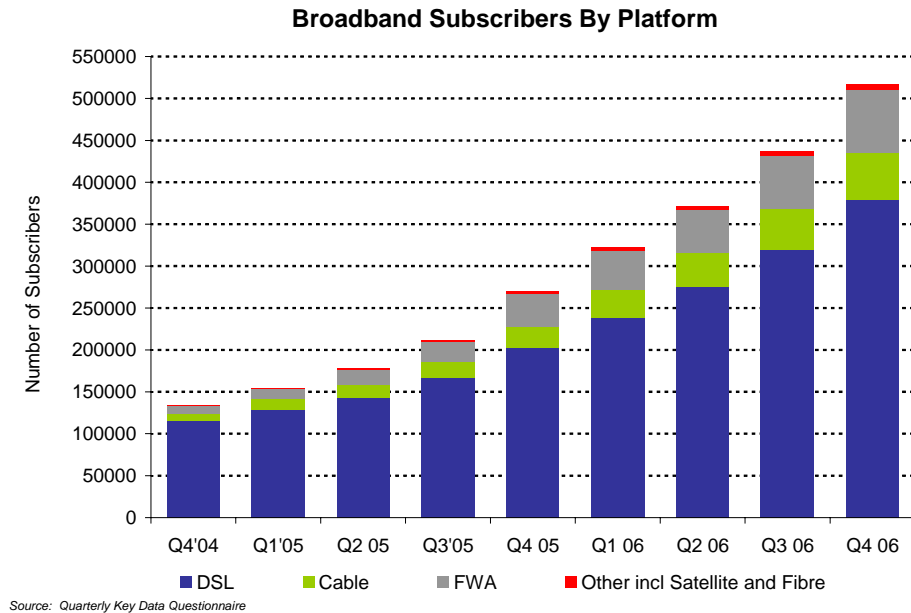
ECTA's Broadband Scorecard[16] provides comparative data on rates of growth in broadband subscriptions across EU-25 member states. The most recent Scorecard for Q3 2006 calculated that average annual broadband subscription growth across EU-25 countries was 32%, compared to growth in Ireland over the same period of 105%.

Figure 2.7.3 breaks down broadband subscribers to provide an estimate of the split of broadband subscriptions between business and residential subscribers. In Q4 2006 71% of total broadband subscribers were classified as residential subscriptions.

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[16] http://www.ectaportal.com/en/upload/File/Broadband%20Scorecards/Q306/FINALBBScQ306.xls

Figure 2.7.3 – Broadband Subscribers by Subscriber Type
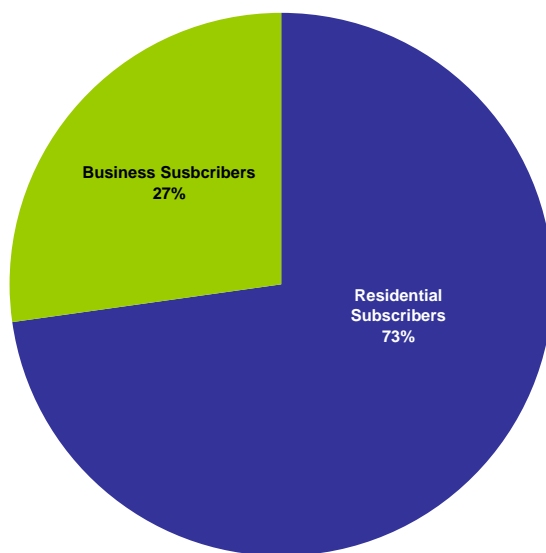
Figure 2.7.4 illustrates *eircom*'s market share of total broadband subscriptions when compared to other authorised operators' (OAO) share of overall broadband subscribers, including DSL and alternative access technologies. Figure 2.7.4 shows the continued fall in eircom's market share of retail broadband while in contrast the OAOs' share of the DSL market, coupled with alternative platform provision such as cable and FWA, has captured a greater percentage of the market. In this period, *eircom* held 48% market share of retail broadband subscriptions, a decline of 1% since Q3 2006, and 8% since Q4 2005. DSL provided by OAOs using either Bitstream or LLU represented a further 25% of all broadband subscriptions.

Despite historic low levels of cable competition in the broadband market, Ireland is catching up with other European countries in cross platform competition through a rapidly growing wireless broadband sector. The recent growth in cable broadband availability and take-up is also a very welcome development. Platform competitors such as cable or FWA operators accounted for 27% of all broadband subscriptions at the end of Q4 2006. This level of platform competition is in line with levels of platform competition elsewhere in the EU-25 countries. Based on the Q3 2006 ECTA Broadband scorecard data[17] it can be calculated that among EU-25 member states, an average of 30% of broadband subscriptions are provided using access technologies other than DSL.

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[17] http://www.ectaportal.com/en/upload/File/Broadband%20Scorecards/Q306/FINALBBScQ306.xls

Figure 2.7.4 – Market share of Total Broadband Market

Market Share of Total Broadband Market

Source: Quarterly Key Data

DSL retailed by eircom   DSL retailed by OAOs   Other Broadband Platforms
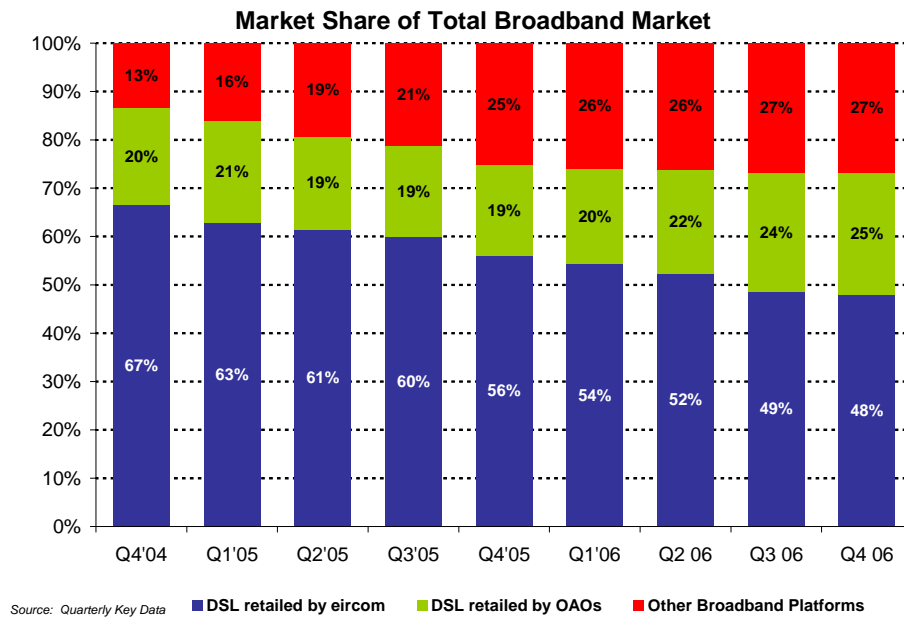
In presenting broadband penetration benchmarks for European countries, ComReg uses both OECD and ECTA data based on the most recently published statistics at the time of publication. ComReg provides broadband data for Ireland to both organisations. Figure 2.7.5 illustrates broadband penetration rates calculated by the ECTA Scorecard on a per capita basis at the end of September 2006[18].

The ECTA scorecard calculated Ireland's broadband penetration at 10.4% in September 2006, compared to an EU-25 average of 15.6%. ComReg estimates that broadband penetration in December 2006 was 12.2%[19].

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[18] http://www.ectaportal.com/en/upload/File/Broadband%20Scorecards/Q306/FINALBBScQ306.xls

[19] Penetration rate is calculated based on total broadband subscriber numbers for DSL, Cable, FWA, and other broadband as a percentage of total population of 4.235 million based on the 2006 Census; source: CSO.

Figure 2.7.5 – Broadband Per Capita Penetration Rate

Broadband Penetration, September 2006 (ECTA)
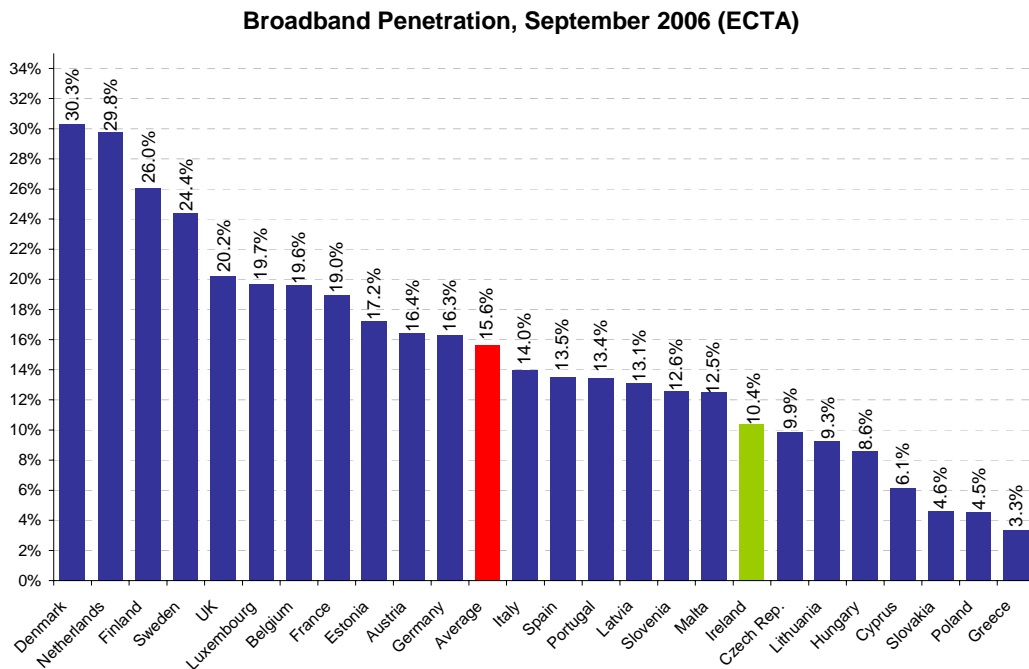
2.8 WiFi Broadband Access

ComReg now includes data on the provision of public and private broadband services over WiFi. ComReg presents data on the WiFi market based on the number of WiFi Hotspots and access points located nationally. Broadband hotspots are typically public wireless access points where a computer, usually a laptop, can connect to the internet. A WiFi Hotspot can be made up of one or more WiFi access points[20]. In Ireland, as in many countries, WiFi hotspots tend to be found in airports, hotel lobbies and cafés and restaurants. In most cases, the user pays for high-speed internet access at an access point, based either on a vouchered payment for a specific amount of time online or a recurring monthly subscription. There are a number of providers of these services in Ireland including Bitbuzz, eircom and BT Ireland. ComReg will continue to assess the appropriate WiFi metrics for the Irish and analyse growth rates in WiFi broadband access as part of its review of the broadband sector.

Figure 2.8.1 – WiFi Hotspots and Access Points

	Q4 2006	Q306-Q406 Growth	Q405-Q406 Growth
WiFi Hotspots	1,238	n/a	n/a
WiFi Access Points	2,467	-1%	n/a

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[20] A WiFi access point is a base station through which WiFi users can access the internet

2.9 ADSL Pricing Data[21]

ComReg commissions Teligen to produce independent benchmarking of broadband prices in the residential and business markets across a number of EU member states. In order to ensure that the same time period is used for analysis of all price baskets (that is fixed voice, mobile and broadband baskets), ComReg presents the same baskets in this report as were used in the Dec 2006 report, i.e. baskets as at November 2006[22]. The June 2007 report will present updates as at February 2007 for all price baskets.

The benchmarking model prices a range of DSL and cable services based on defined usage of 25 hours per month, with each session assumed to last for 1 hour. It further assumes a download usage of 10 Gigabytes every month for each service. The data presented in the following two charts illustrates the cheapest product available in each country under these usage assumptions for residential DSL products, and for both DSL and cable offerings. Details on the upload and download speeds for each of the analysed products are included in the figures. Further information on the composition of the broadband baskets can be found in the Explanatory Memorandum which accompanies this report[23].

Figure 2.9.1 – Lowest Monthly Rental ADSL Basket- November 2006
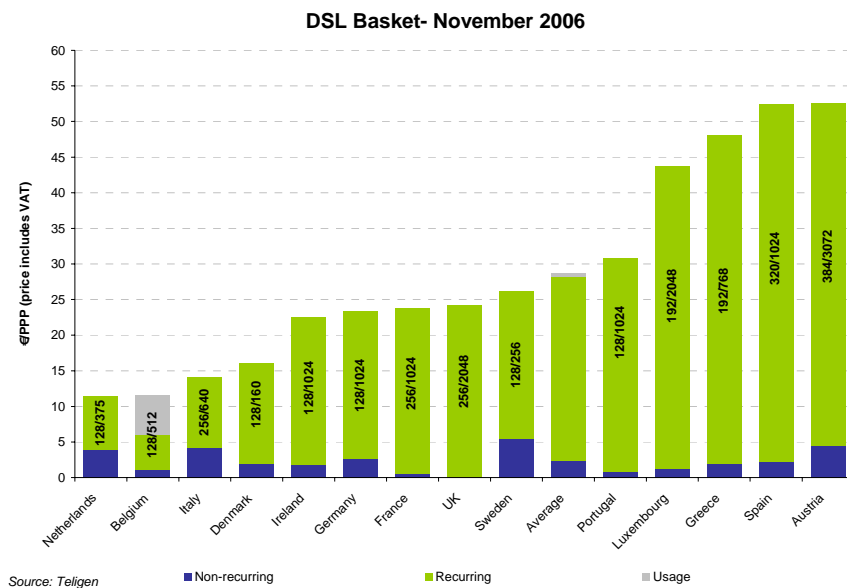
Ireland is ranked in 5th place in the DSL basket, that is 5 places less expensive than the EU average. The Irish package used is eircom's Broadband Home Starter package.

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[21] 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.

[22] ComReg Document 06/68

[23] ComReg Document 07/17a

ComReg 07/17

Figure 2.9.2 – Lowest Monthly Rental Cable and DSL Basket –November 2006[24]

DSL and Cable Basket- November 2006

Source: Teligen   ■ Non-recurring   ■ Recurring   ▫ Usage
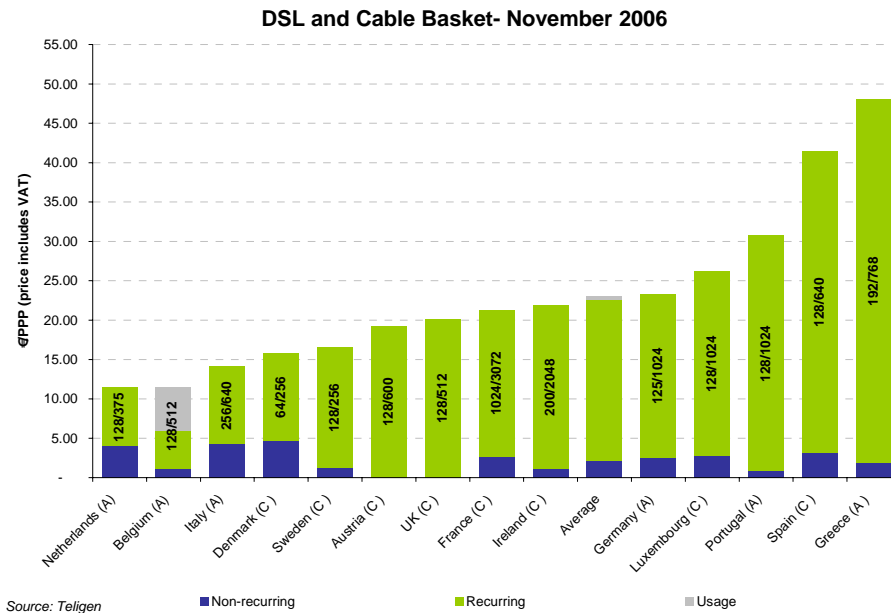
Ireland is ranked in 9th place in this basket, one place less expensive than the EU average price for this basket. In Ireland, this product is the Cablenet Broadband Easy product offered by Chorus.

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[24] Cable Broadband Offerings may not be available nationally in all countries. (A) denotes where the package is a ADSL services, (C) denotes where the package is a Cable broadband service

3   Mobile Market Data

3.1   Number of Subscribers and Penetration Rate

3.1.1   Irish Mobile Penetration Rate

Figure 3.1.1 – Irish Mobile Penetration Rate
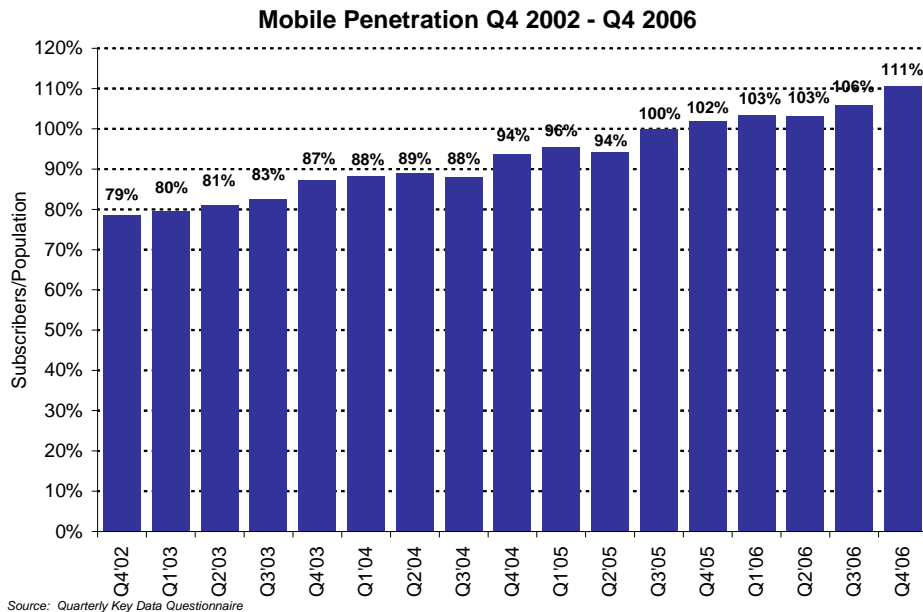
There are almost 4.7 million 2G and 3G mobile subscribers in Ireland[25]. Figure 3.1.1 illustrates mobile penetration growth the end of 2002, and notes that at the end of 2006, mobile penetration in Ireland was 111%[26]. Subscriptions in this report are calculated based on the number of active SIM cards and it should be noted that some mobile users may have more than one active SIM card[27]. There is likely to be double counting in the methodology used for mobile subscriptions using active SIMs. This is particularly so in this quarter which includes the Christmas period. This is due to increased purchases of mobile handsets and new or replacements SIM cards as Christmas gifts. Where mobile subscribers have changed handset and SIM card in this period, both the old SIM and new SIM will be counted as separate subscriptions in this period.

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[25] ComReg does not include a separate analysis of the 3G market in this report. A Q4 2006 Trends Survey found that 5% of residential mobile phone users now used a 3G service. Results of this survey can be found in ComReg Document 07/13.

[26] Mobile penetration rate is based on a population estimate of 4.235 million based on the 2006 Census; source: CSO

[27] Vodafone defines an active SIM as one on which a billable event, i.e. made an outgoing call or sent a text, has occurred in the previous 8 months; all other market operators define an active SIM as one on which a billable event has occurred in the previous 3 months.

3.1.2 European Mobile Penetration Rates-

Figure 3.1.2 illustrates national mobile penetration rates across the EU in December 2006. Average EU penetration across EU-15 member states was estimated at 111%, the same penetration rate as reported for Ireland in Q4 2006. Only four EU-15 members are estimated to have a mobile penetration less than 100% - Germany, Netherlands, Belgium and France.

Figure 3.1.2 – European Mobile Penetration Rates

European Mobile Penetration - December 2006

Source: Baskerville Mobile Communications (includes 3G subscriptions), and ComReg
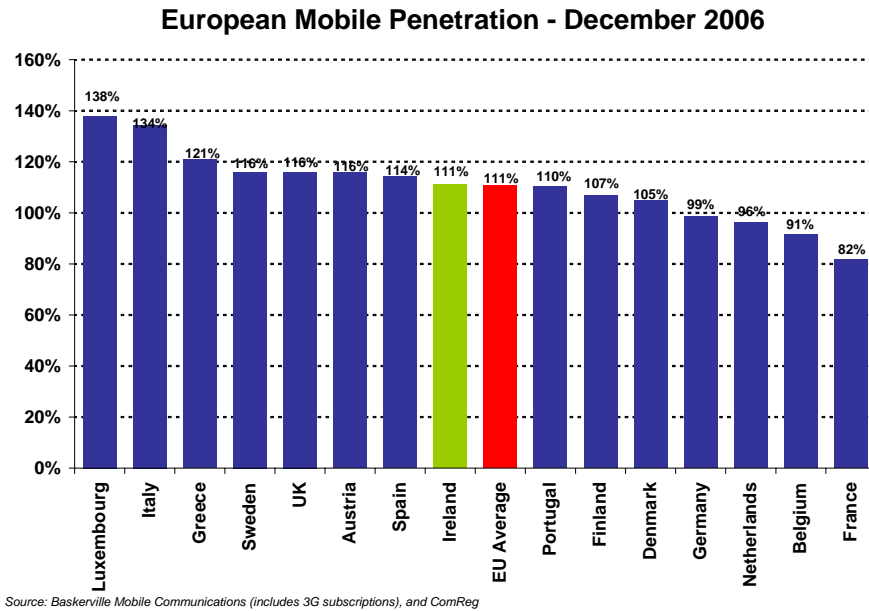
Figure 3.1.3 – Number of Subscribers (Pre-Paid/Post Paid)

Overall Pre-paid/Post-paid breakdown (Q1'05 - Q4'06)

Source: Quarterly Key Data Questionnaire

ComReg 07/17
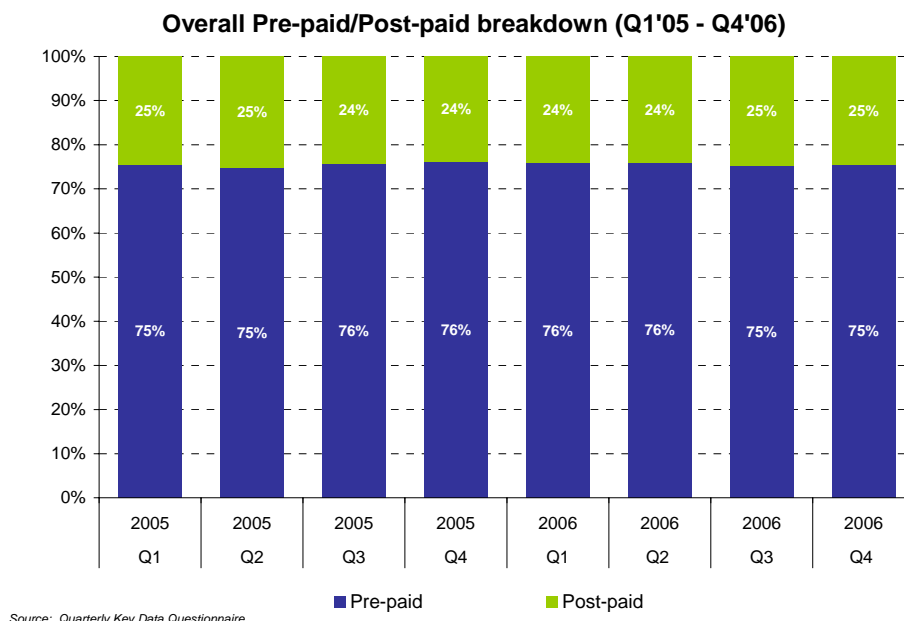
3.1.3 Subscribers Pre-Paid / Post-Paid Comparison

Figure 3.1.3 illustrates the breakdown of total mobile subscribers between pre-paid and post-paid subscriptions on both 2G and 3G networks at the end of 2006. In Q4 2006 the profile of mobile subscribers split by post-paid and pre-paid subscribers was unchanged, with pre-paid subscriptions accounting for 75% of all active mobile subscriptions.

Figure 3.1.4 indicates the pre-paid and post-paid subscriber profile of each of the three largest operators in the Irish mobile market. The subscriber profile of each of these operators remains unchanged this quarter, with the exception of O2 which increased its pre-paid base by 1%.

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

Pre-paid/Post-paid subscriber breakdown by operator - Q4'06
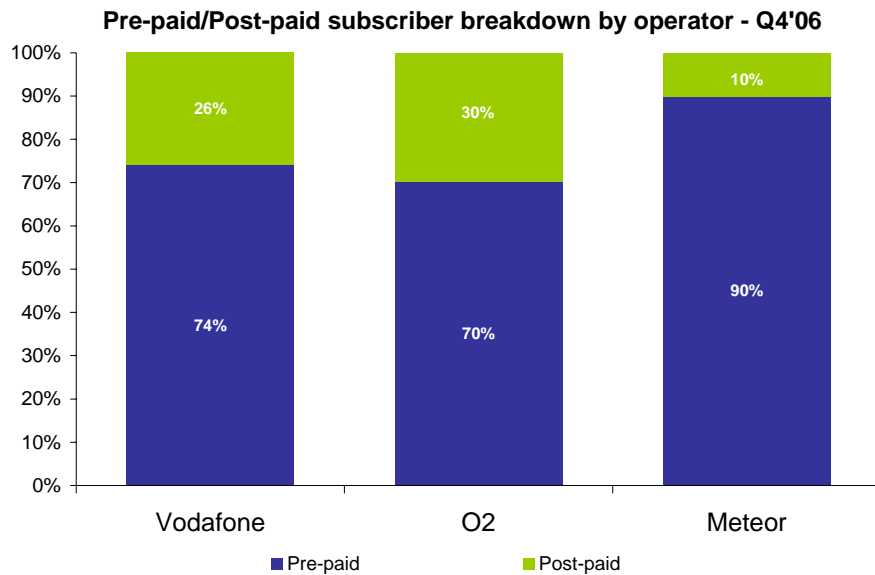
Source: Quarterly Key Data Questionnaire

3.2 Market Shares

Market share data by subscription and by retail revenue is presented for the largest three operators in the mobile market at the time of publication. The overall trend in changes in market share among the top three operators has continued, with Meteor continuing to gain market share at the expense of the two larger operators in the market. However it should be noted that while Meteor has made the most significant gains in terms of market share, all mobile operators in the Irish market have added subscribers during this period.

Market share by revenue, as illustrated in Figure 3.2.2 indicates a consistent market share growth by Meteor since 2005; however it should be noted that while Meteor represents 17.4% of mobile subscriptions among the top three mobile operators, it accounts for a smaller share of market revenue, having a 13.1% revenue market share in Q4 2006.

Figure 3.2.1 – Market Share – Number of Subscribers

Market Share by Subscription Q1 2005 - Q4 2006

	2005 Q1	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Q4
Meteor	9.8%	10.7%	11.5%	13.4%	14.6%	15.6%	16.5%	17.4%
O2	39.7%	39.9%	38.8%	38.0%	37.3%	36.6%	36.0%	35.4%
Vodafone	50.5%	49.4%	49.7%	48.6%	48.1%	47.8%	47.6%	47.2%

Legend: Vodafone, O2, Meteor

Source: Quarterly Key Data Questionnaire

Figure 3.2.2 – Market Share – Revenue

Market Share by Revenue Q1 2005- Q4 2006

	2005 Q1	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Q4
Meteor	4.9%	6.1%	6.1%	8.2%	9.4%	10.8%	11.9%	13.1%
O2	45.7%	44.6%	44.6%	42.3%	40.2%	41.2%	40.5%	40.9%
Vodafone	49.4%	49.3%	49.3%	49.6%	50.3%	48.0%	47.6%	46.0%

Legend: Vodafone, O2, Meteor

Source: Quarterly Key Data Questionnaire
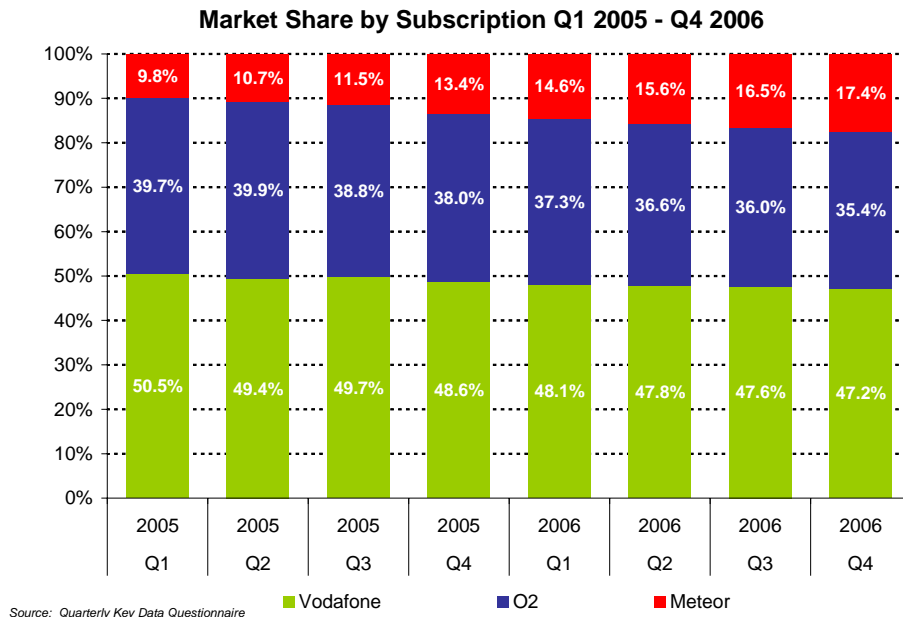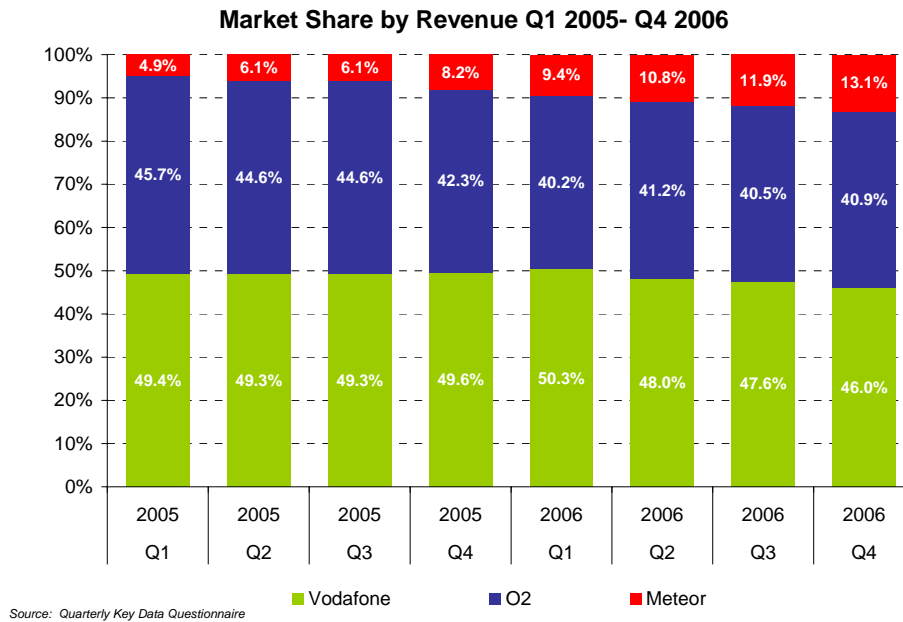
ComReg 07/17

3.3 Switching 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. A total of 755,500 people[28] have used MNP to switch operator since its launch in June 2003. In Q4 2006, 85,700 mobile subscribers switched mobile operator while retaining their mobile number, slightly ahead of the quarterly average volume of numbers ported which was 75,000.

Figure 3.3.1 – Mobile Numbers Ported

Source: Quarterly Key Data Questionnaire
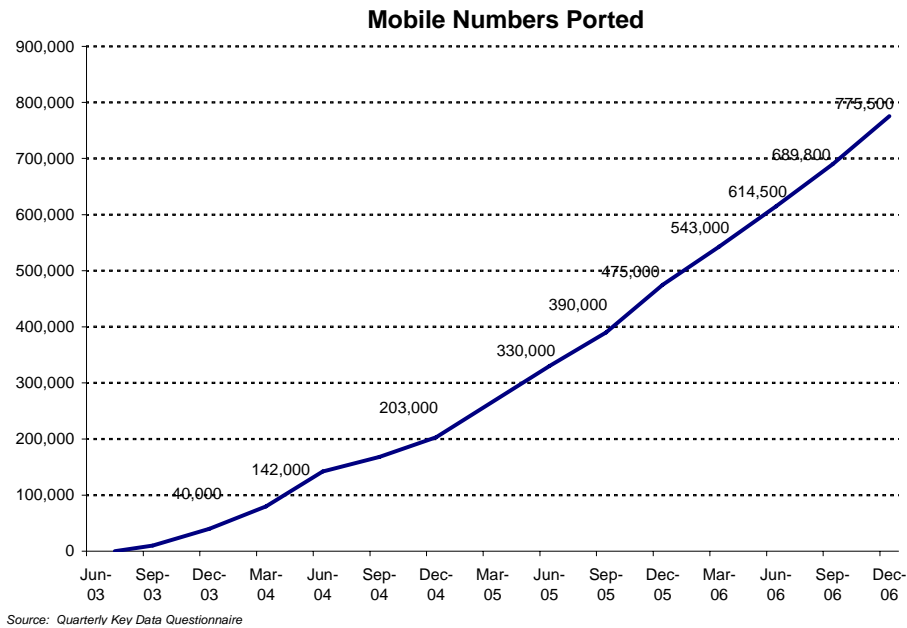
3.4 Mobile Volumes

Figure 3.4.1 illustrates the growth in voice minutes, SMS, and MMS (Multimedia Messaging Service) messages sent since Q3 2005. Mobile voice traffic in Q4 2006 exceeded 2 billion minutes for the first time in the Irish mobile market. There has been an 11% increase in voice traffic this quarter, however an element of the growth reported in this quarter is a result of a change in methodology in the calculation of voice traffic in the Quarterly Report. Previously ComReg excluded certain classes of mobile traffic which were not associated with a revenue stream, e.g. voicemail from some providers was provided to the end-user free of charge. ComReg has revised this approach in Q4 2006 to encompass all mobile traffic, regardless of whether the traffic type generates retail revenue for the operator.

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[28] This figure represents cumulative portings to data and may reflect multiple ports by a single subscriber or SIM card.

The number of SMS messages sent this quarter increased by 14%, with over 1.64 billion messages being sent in the Q4 2006 period. This increase reflects both a trend of increasing usage of SMS messaging by mobile users, and seasonal factors such as increased volumes of text messages over the Christmas and New Year period. Year on year, the number of mobile messages sent by Irish mobile subscribers showed continued strong growth in volumes, with an overall increase of 38%. An average of nearly 117 SMS messages were sent per subscription, per month in Q4 2006, compared with 94 one year earlier in Q4 2005.

Figure 3.4.1 – SMS, MMS and Call Minutes

Voice, SMS and MMS Volumes Q4, 2006

Source: Quarterly Key Data
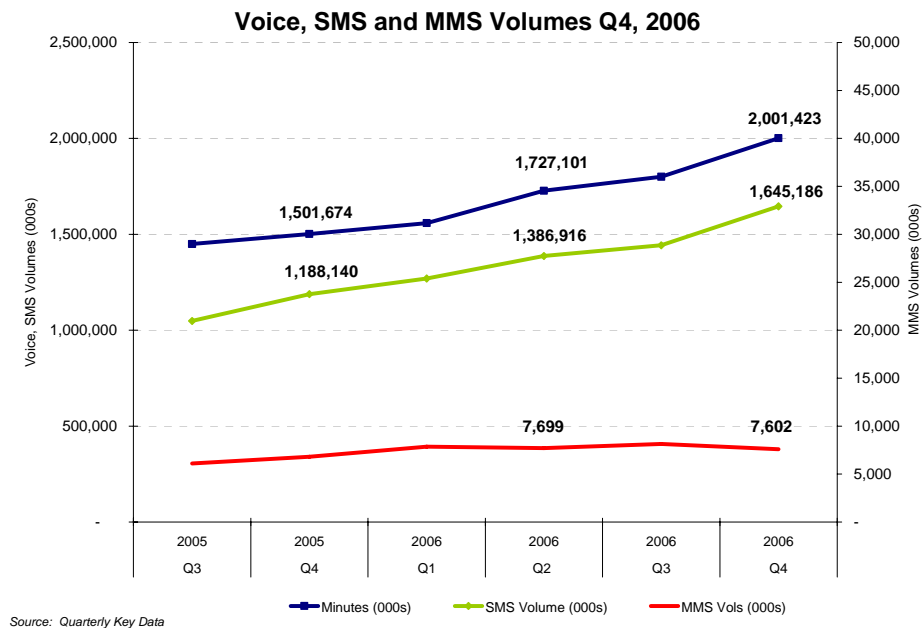
The number of MMS messages sent in the quarter remains relatively low compared to voice minutes and SMS volumes. There were just over 7.6 million MMS messages sent during the quarter.

3.5 Mobile Revenues

3.5.1 Mobile Revenues by Voice and Data

Mobile retail revenues for the quarter were in excess of €506 million, a 5% quarterly increase in revenue which will have been largely influenced by increased usage and the purchase of mobile handsets over the Christmas period. Figure 3.5.1 outlines the percentage of mobile revenues attributable to data revenues in the Irish market. This benchmarking data is calculated independently by the Yankee Group, and includes data revenues from SMS messaging, but also other data services such as MMS messaging, GPRS data services and 3G data services. Irish mobile operators have the 2nd highest level of

data revenues as a percentage of their total mobile revenues, at 22%; this is a 1% increase in the percentage of mobile revenues attributable to data compared with the previous three quarters.

Figure 3.5.1 - Data Revenues as % of Total Mobile Revenue[29]

Data Revenues as a % of Total Mobile Revenues Q4, 2006
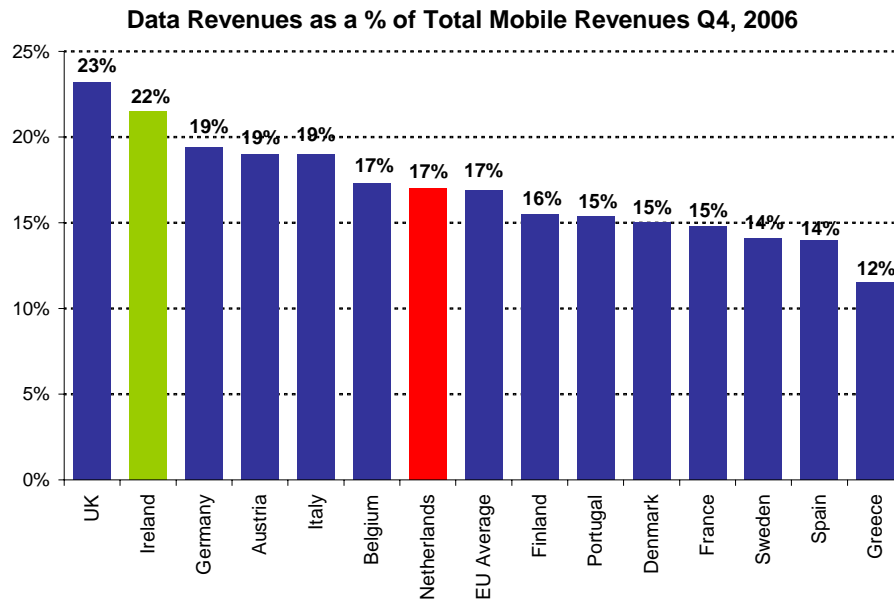
Source: Yankee Group

Figure 3.5.2 compares ARPU (average revenue per user) across several EU countries. Average revenue per user is an indication of average monthly revenue generated by mobile subscribers in each country. Mobile ARPU in Ireland is estimated at €44.80 per month in Q4 2006, a 5% decline since the last quarter, and a 6% decline in ARPU in Q4 2005. Mobile ARPU in Ireland still remains the highest among the EU member states monitored, and substantially higher than the EU average of €29.91[30].

Average Revenue per User (ARPU) must be qualified by additional analysis of both the cost of mobile services within a country, and levels of average mobile usage by subscribers. ComReg is currently working with the mobile industry to establish appropriate metrics for calculating minutes of use for mobile subscribers in Ireland, and hopes to publish this information in future Quarterly Reports to provide additional analysis on the mobile market.

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[29] Note that the graph relates to EU-15 countries except Luxembourg where no data was available.

[30] 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. Note that the graph relates to EU-15 countries except Luxembourg where no data was available.

Figure 3.5.2 - European ARPU Compared – Q4 2006

European ARPU Compared - Q4 2006

Country	ARPU
Ireland	€44.80
Belgium	€36.16
France	€35.58
Austria	€33.03
UK	€32.63
Spain	€31.57
Netherlands	€30.14
EU Average	€29.87
Finland	€29.21
Greece	€28.39
Denmark	€27.81
Italy	€24.60
Sweden	€21.96
Portugal	€21.33
Germany	€21.05

Source: Yankee Group
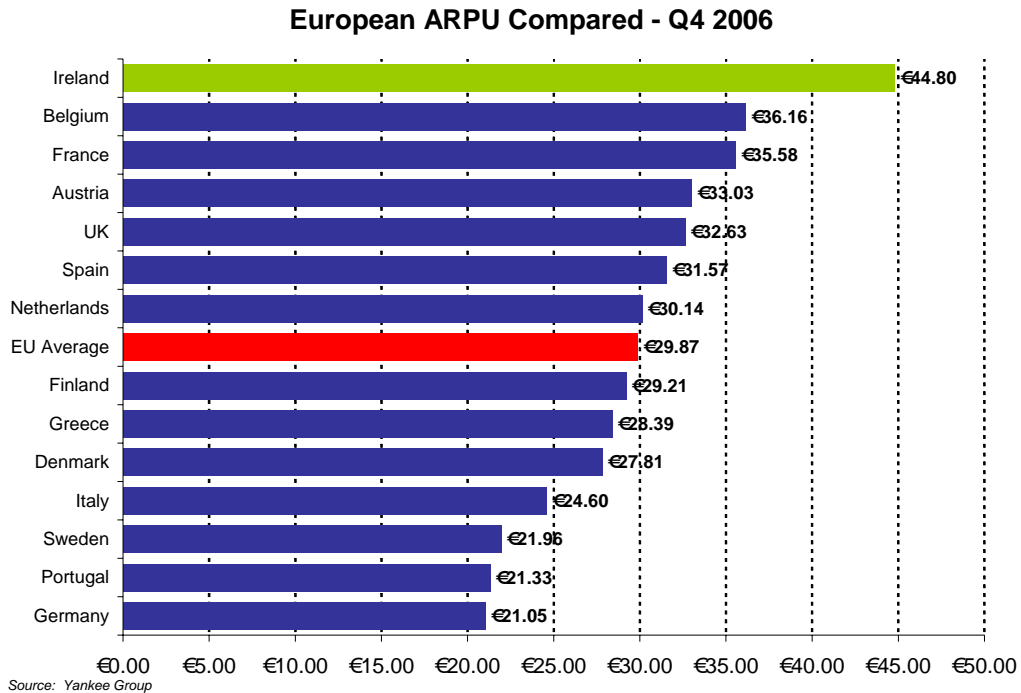
3.6 Mobile Pricing Data[31]

The Teligen mobile baskets presented in this Quarterly Report are based on an OECD-approved methodology using assumptions around specific usage levels for low, medium and high contract and pre-paid subscriber packages. They are calculated and analysed independently by Teligen, using an OECD methodology which includes PPPs (Purchasing Power Parities) to reflect the real cost of mobile services compared to all other costs within a country. While all mobile post-paid tariff baskets presented in the Teligen baskets are currently based on typical 2G services as approved by the OECD, ComReg recognises that there may be other more competitive packages available with 3G handsets.

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[31] 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 'Voice' component of price refers to the charges imposed by operators, arising from the number of voice calls made by the user, while "Message" refers to the charges imposed by operators, arising from the number of SMS and MMS messages sent by the user.

3.6.1 Low User Post Paid Mobile Basket[32]

Ireland continues to be ranked in 9th place out of the 19 EU countries analysed, and remains one place behind the EU average in terms of price.

Figure 3.6.1 - OECD Low User Post Paid Mobile Basket – November 2006

Source: Teligen

To note: The numbers in brackets represent each Member State's respective rankings as at August 2006
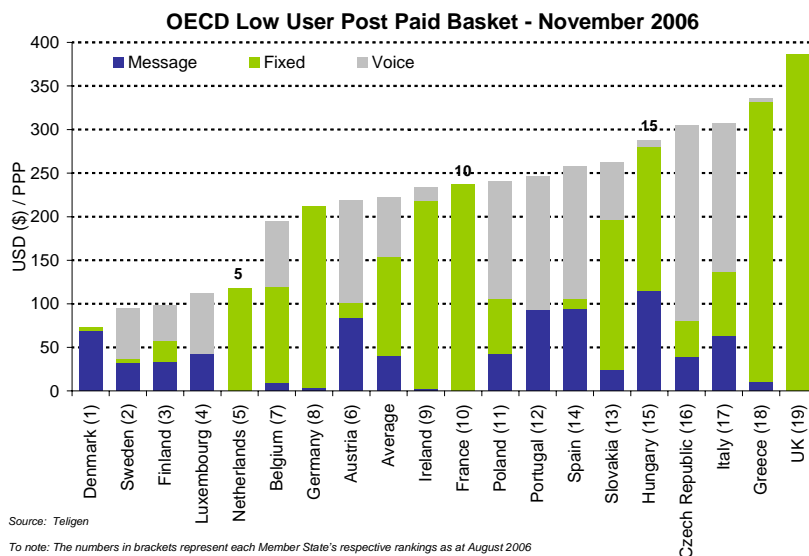
3.6.2 Medium User Post Paid Mobile Basket

Ireland's position in this basket is ranked 8th among the 19 EU countries monitored this quarter, a one place drop since August 2006. Ireland remains one place behind the EU average.

Figure 3.6.2 - OECD Medium User Post Paid Mobile Basket – November 2006

Source: Teligen

To note: The numbers in brackets represent each Member State's respective rankings as at August 2006

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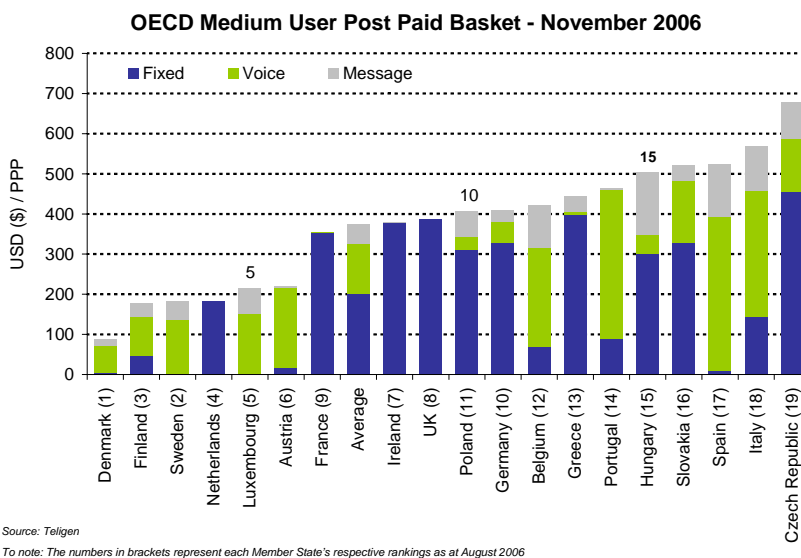
[32] All tariffs are inclusive of VAT, rates will vary between Member States

3.6.3 High User Post Paid Mobile Basket

Ireland has dropped one place this quarter, and is now ranked in 8th place among EU-19 countries analysed in this basket. Ireland is currently two places ahead of the average in terms of price.

Figure 3.6.3 - OECD High User Post Paid Mobile Basket – November 2006

Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at August 2006
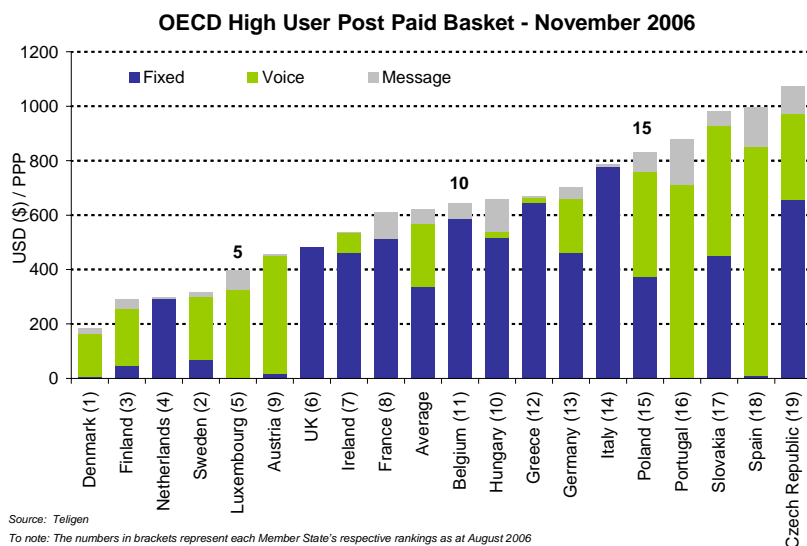
3.6.4 Pre-Paid Mobile Basket[33]

Ireland is ranked at 8th place in the pre-paid basket this quarter, a four place improvement since the previous quarter, and three places ahead of the EU average.

Figure 3.6.4 - OECD Pre-Paid Mobile Basket – November 2006

Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at August 2006

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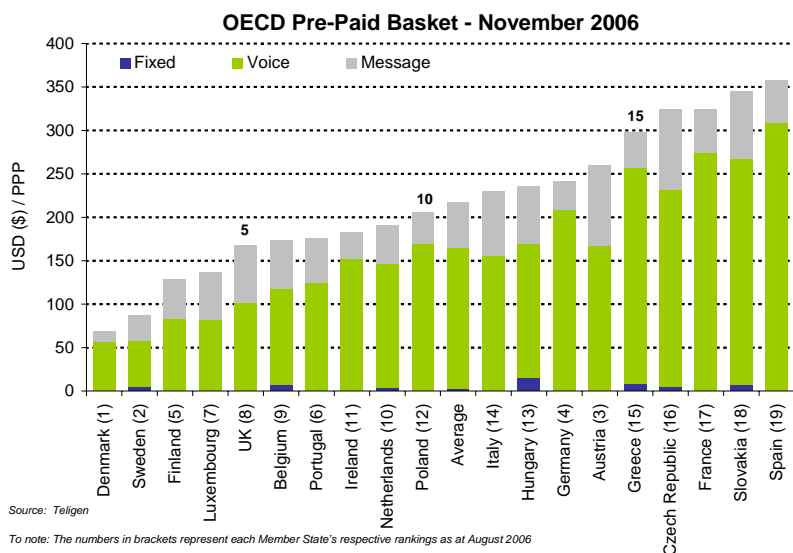
[33] The OECD has found that there is little difference between the average pre-paid usage and low-user post-paid usage. Thus, the pre-paid and low user post paid baskets are based on the same usage assumptions.

4 Broadcasting

4.1 Overall Broadcasting Market

The broadcasting analysis provided in this report uses operator data in conjunction with CSO estimates[34] of the total number of TV households in Ireland. This is particularly relevant in deriving the number of households that only use a Free-to-Air[35] television service. There are 1.46 million TV households in Ireland, based on the CSO's 2006 Information Society report.

Of the total number of TV households at the end of December 2006, there were approximately 579,000 subscribers to cable[36]/MMDS[37] television services in Ireland. For the same period BSkyB reported 465,020 Irish satellite[38] TV subscribers. This is a 5% increase in subscriptions for the quarter, and an 18% increase in subscriptions year-on-year[39]. The total number of pay TV households in Ireland (cable/MMDS and satellite) is 1.04 million, equivalent to nearly 72% of total TV households.

Figure 4.1.1 – Broadcasting Subscribers and growth rates by Platform

Platform	Number of Subscribers	Quarterly Change Q306 - Q406	Annual Change Q405 – Q406
Cable/MMDS	579,000	0.5%	1.8%
Satellite	465,020	5.4%	18.3%
Free-to-View	414,280	1.1%[40]	-10%

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[34] ComReg attempts to use updated TV household data where available. Until Q3' 005, TV households were estimated at 1.35 million based on CSO data. In 2006, a figure of 1.43 million was used based on 2005 information Society and Telecommunications Report, 2005. ComReg has revised this estimate based on the latest CSO figures published in the 2006 Information Society report, which reported 1.4583 million TV households in Ireland.

[35] Free-to-Air television broadcasts are sent unencrypted and may be received via any suitable receiver. Although these channels are described as 'free', the viewer does pay for them by payment of a licence fee.

[36] Cable television is a system of providing television to consumers via radio frequency signals transmitted to televisions through fixed optical fibres or coaxial cables as opposed to the over-the-air method used in traditional television broadcasting (via radio waves) in which a television antenna is required.

[37] MMDS (Multichannel Multipoint Distribution Service) is a wireless telecommunications technology, used as an alternative method of cable television programming reception. MMDS is usually used in sparsely populated rural areas, where laying cables is not economically viable.

[38] Satellite television is television delivered by way of communications satellites, as compared to conventional terrestrial television and cable television.

[39] This is based on public announcements by Sky

[40] Free-to-View subscribers are calculated by subtracting the total number of Pay TV subscribers (i.e. Cable/MMDS and Satellite subscribers) from the estimate of total TV households provided by the CSO. Thus while Free-to-View subscribers in this quarter appear to have increased, the increase is due to the upwardly revised total TV household figure and is not an actual increase.

Figure 4.1.2 - Take Up of Broadcasting Services

Broadcasting Market Breakdown Q4'06

Legend: ■ Free to View Only ■ Analogue Cable ■ Digital Cable ■ Satellite
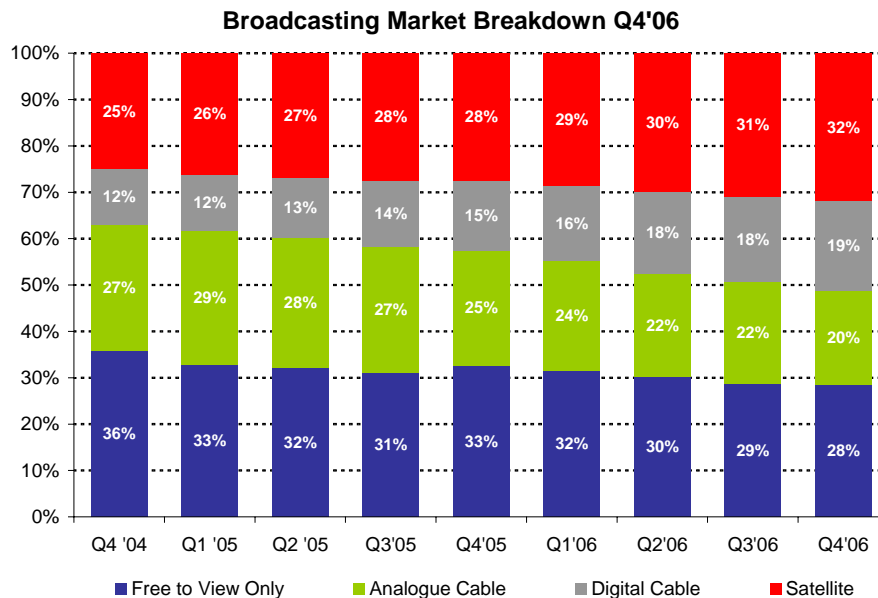
Source: Quarterly Key Data Questionnaire, BSkyB

4.2 Pay TV

Figure 4.2.1 profiles the pay-TV market in Ireland comparing the use of a fee-based analogue digital service, provided by cable operators, and digital TV, provided via either a digital cable service or satellite service. The figure indicates that 72% of pay-TV households receive a digital TV signal; an increase of 3% since Q3 2006 and a year-on-year increase of 9% since Q4 2005.

Figure 4.2.1 - Pay TV Market (Analogue and Digital)

PayTV Market (Analogue and Digital) Q4'06

Legend: ■ % Analogue (of PayTV) ■ % Digital (of PayTV)
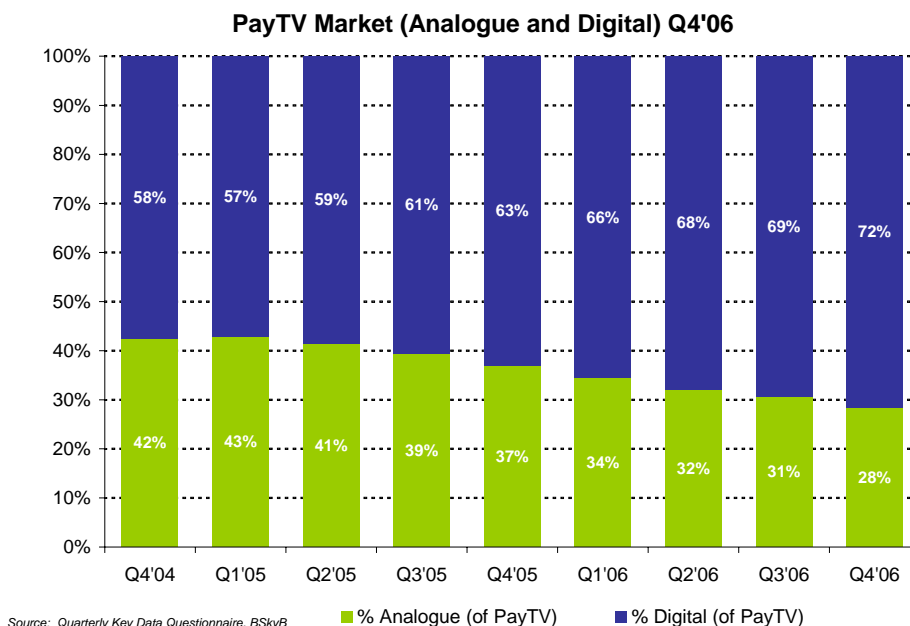
Source: Quarterly Key Data Questionnaire, BSkyB

4.3 Digital TV

At the end of the December 2006, there were nearly 746,500 digital TV subscribers which include cable/MMDS and satellite customers. Fifty one percent of all TV households in Ireland now receive their TV service via a digital television signal, based on either digital cable or satellite.
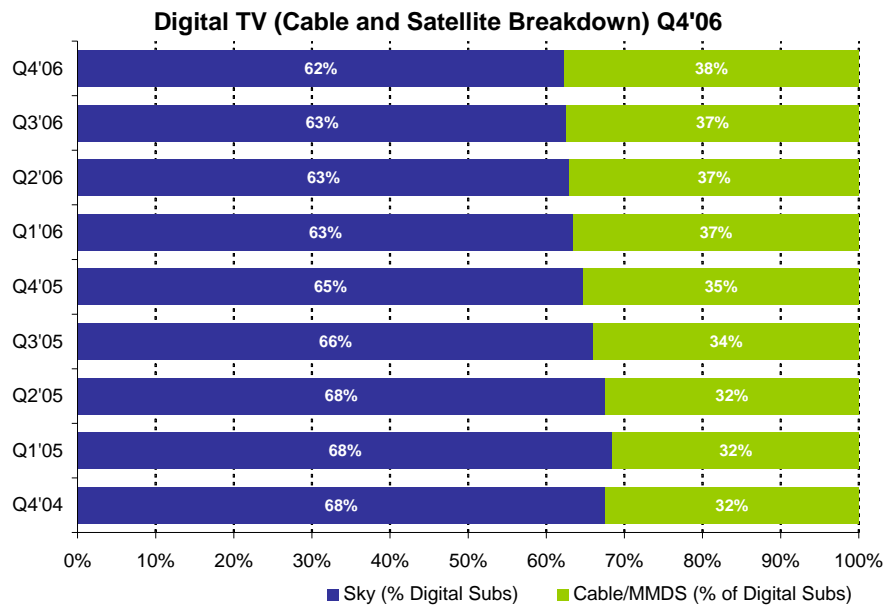
Figure 4.3.1 examines the profile of the digital TV market, examining the proportion of digital subscribers who receive their TV signal via a satellite subscription compared with those using digital cable. The profile of this group of TV households has changed slightly this quarter, with 62% of digital TV households using a satellite service to receive digital TV. Since Q4 2004, digital cable's proportion of this sector has increased from 32% to 38%.

Figure 4.3.1 - Digital TV (Cable and Satellite Breakdown)

Digital TV (Cable and Satellite Breakdown) Q4'06

Quarter	Sky (% Digital Subs)	Cable/MMDS (% of Digital Subs)
Q4'06	62%	38%
Q3'06	63%	37%
Q2'06	63%	37%
Q1'06	63%	37%
Q4'05	65%	35%
Q3'05	66%	34%
Q2'05	68%	32%
Q1'05	68%	32%
Q4'04	68%	32%

Source: Quarterly Key Data Questionnaire, BSkyB

5   Emerging Trends- Mobile Content

5.1   What is Mobile Content?

Since the launch of commercial mobile services by the first mobile operator in Ireland eircell in 1985, mobile services and the mobile phone have become increasingly integrated into daily life as a key consumer product. In addition to its initial use as a device for mobile voice services, the mobile phone has stimulated increased demand for a whole range of content on the move. For the purposes of this report mobile content is defined as any type of media which can be accessed, viewed or utilised on a mobile phone and includes services such as SMS messaging, video calling, radio and television services, taking and sending photos, browsing the internet, and downloading ringtones and graphics, in addition to a range of other services . This definition is based on a range of sources including Wikipedia[41].

5.2   International trends

The global market for mobile content has grown since the late 1990s. Japanese mobile phone users were the earliest adopters of custom-built content for mobile devices, while in contrast consumers in Europe, the United States and Canada were slower to embrace the available value added services. A recent report published by Forrester[42] found that 52% of Japanese users regularly use their mobile to browse the internet, in comparison to only 10% of European users. The innovative and wide range of content launched by operators such as DoCoMo and KDDI is likely to have been a key factor in driving the phenomenally fast growth in Japan. According to Forrester, European consumers appear content with SMS, and a further 39% of European mobile users who have never used any mobile internet services don't see any value in using them.

The graph below, courtesy of the Yankee Group, would seem to support this view, with SMS generating the largest return in value-added-services revenues while the adoption of other content services remains low.   Overall growth in the mobile data/content market has been steady in Europe to date. A recent report published by the Yankee Group[43] has shown a gradual increase in total revenue generated by non-voice services, up from 17% in 2005 to 19% in 2006 in Western Europe. In Ireland,

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[41] http://en.wikipedia.org/wiki/Mobile_content

[42] **Why Japanese Mobile Internet Is A Success** - *And What European Operators Should Do To Catch Up*, Forrester; March 2007

[39] Driving Usage of Value–Added Mobile Services- Yankee Group report; December 2006

the proportion of total revenue generated from non-voice services, which is currently generated primarily by SMS, was around 22% by the end of 2006.

Figure 5.2.1 – Adoption of Mobile Content Services. Source: Yankee Group, Dec 2006
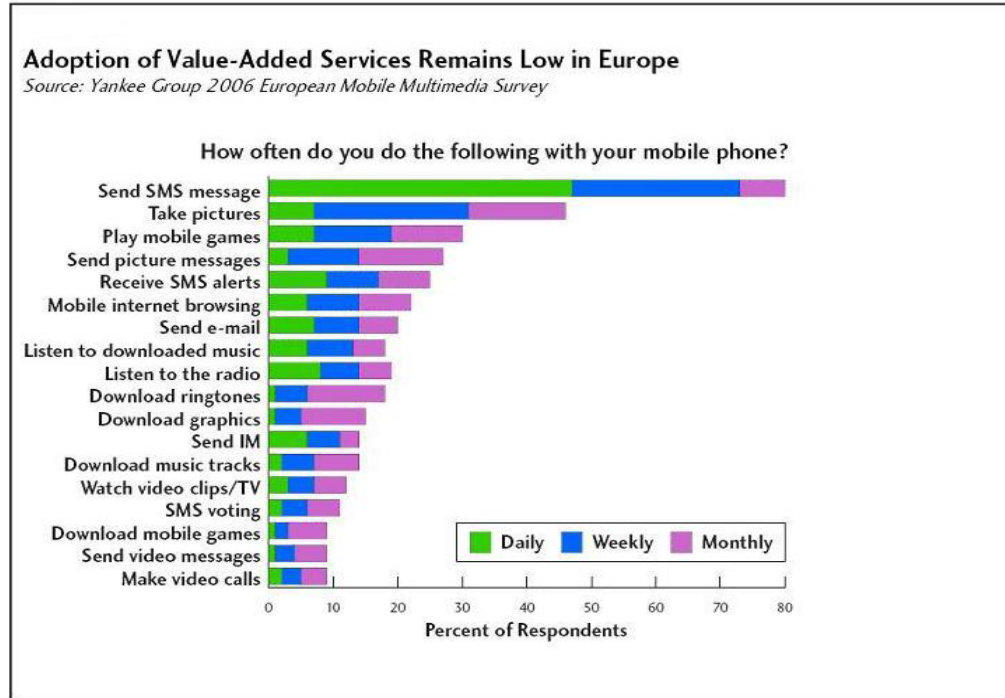
5.3 Market trends with regard to mobile content services in Ireland

All four mobile operators in Ireland offer a variety of content services via their own-brand services such as *Vodafone Live*[44] , *Meteor Stuff*[45] , *O2 Active*[46] and W*hat's on 3*[47].   Data from surveys commissioned by ComReg would appear to suggest that there has been an increase in mobile data services used by both the residential and business communities[48] however, mobile data usage continues to be predominantly limited to traditional mobile content services such as SMS. In a recently published ComReg Amárach Trends survey[49] mobile users were asked about the range of activities they performed on their mobile.   An analysis of activities based on age profiles suggests that younger users are driving mobile content usage, predominantly downloading ringtones (33%) and to a lesser degree games (18%) and music (11%).

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[44] http://www.vodafone.ie/vlive/

[45] http://www.meteor.ie/stuff/play.html

[46] http://www.o2online.ie/wps/wcm/connect/O2/Home/Personal/Services/O2+Active

[47] http://www.three.ie/on3/index.htm

[48] http://www.comreg.ie/_fileupload/publications/ComReg0657a.pdf

[49] http://www.comreg.ie/_fileupload/publications/ComReg0664.pdf

5.4 Challenges

There are a number of broad challenges to operators in rolling out high quality mobile content which is both useful and attractive to consumers.

The Right Content/Device- there are a range of challenges to both mobile operators and content providers in providing high quality content which is fit for purpose over a mobile handset. In addition to making content "mobile friendly" for consumption, the extent to which content provision follows an "open" model of content delivery, as opposed to a "walled garden approach"[50], is likely to provide a challenge to mobile operators and an opportunity for niche and specialist content developers. Furthermore finding the right device that is both attractive and user friendly for accessing mobile content will be important if content-rich services are to be widely adopted.

To the Right Consumers- segmenting content appropriate to specific customer profiles will be essential to developing attractive customer propositions. Content which will be attractive to younger consumers, such as music and video downloads, may not be as successful with adult users and business users, who could be targeted instead by mobile email and calendar services or mobile Global Positioning System (GPS) services.

At the Right Price- there has been considerable industry debate around appropriate pricing models for mobile content. ComReg's Trends surveys suggest that those who have used mobile content have done so predominantly to try out a new technology[51]. The use of the mobile phone for new content purposes will inevitably involve a period of exploration and experimentation. In order to allow mobile subscribers to adopt mobile content relevant to them, there is a strong argument for mobile operators to initiate flat-rate pricing for mobile content in order to drive usage, as has been done successfully with broadband services delivered over other platforms such as cable modem and DSL.

5.5 The Future for Mobile Content

With mobile subscription levels reaching saturation across all European markets, future growth in the sector will come from the usage and adoption of content-rich services by mobile consumers.   All four mobile operators in Ireland have launched,

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[50] http://en.wikipedia.org/wiki/Walled_garden_(media)

[51] http://www.comreg.ie/_fileupload/publications/ComReg0664.pdf

and continue to develop their data-based content services to both their consumer and business customer base. According to a report commissioned by the Yankee Group[52], revenue generated by mobile content to date has largely been from ringtones and games but these downloadable content markets would appear to be reaching maturity, and providers will have to make a concerted attempt to extend appeal beyond the core group currently subscribing to these services.

It is likely that mobile network operators will continue to seek agreements and alliances with key entertainment and content partners. The Vodafone Group has recently announced a number of agreements with global internet-based content providers such as YouTube, Google Maps and Yahoo!. O2 Ireland has recently announced the commencement of customer trials of broadcast mobile TV providing 13 TV channels in partnership with mobile broadcasting specialist Arqiva. O2 has also partnered with Windows Live™ Messenger to provide an instant messaging service.

Forrester suggests that better education and support at the point of sales may assist in uptake as well as targeting users with timely and location-relevant content. Given the relative saturation of mobile phones in Western Europe, the Yankee Group anticipates that further growth in the mobile market will be driven by an increased demand for mobile content, particularly in mobile TV and internet browsing, with end users seeking faster connectivity, flat rate pricing and the ability to access all the services they currently use on the internet.

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[52] Where will Europe's growth come in 2007? – The Yankee Group; February 2007