Commission for
Communications Regulation

Irish Communications Market

Quarterly Key Data Report

Data as of Q3 2008

Document No:	**08/ 101**
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Corrigendum for the September 2008, Quarterly Key Data Report, ComReg Doc

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- Mobile broadband per capita penetration at the end of Q3 2007, Q4 2007 and Q1 2008 was 2%, 2.9% and 4.3% respectively.
- Total mobile subscriptions increased by 39,555 in Q2 2008 not 55,000 as previously stated.
- Tariff data for Germany in the PSTN pricing baskets was incorrect for May 2008 and therefore, any comparisons should not be made with this time period.
- The residential DSL and Cable pricing basket used for June 2008 referred to DSL only and therefore, it cannot be compared with the broadband pricing basket in this report.

1 Overall Market Data

Data presented in this report is based on quarterly questionnaires completed by authorised operators for the period from 1st July 2008 to 30th September 2008. The report is based on submissions from 62 active operators.

1.1 Number of Authorisations

Figure 1.1.1 - Total Number of Authorisations

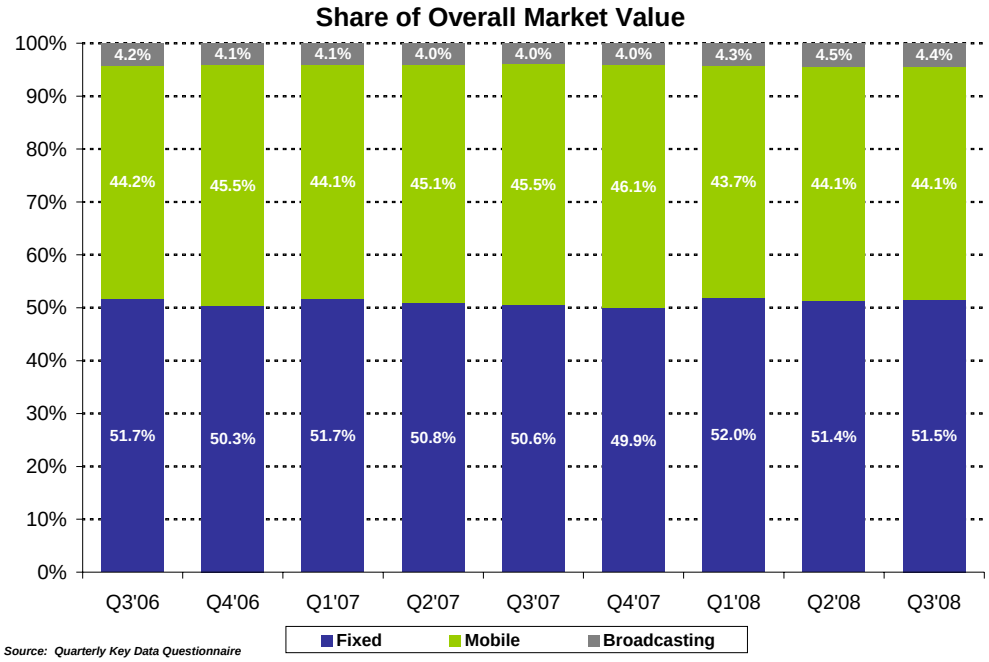
Total Authorisations	December 2008
No. of fixed and wireless authorisations	336
No. of mobile telephony authorisations	6
No. of broadcasting authorisations (incl. Cable TV, MMDS, Deflectors)	84
Total Number	426

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 426 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 includes a number of undertakings who are authorised to use license-exempt spectrum for the provision of 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]



Source: Quarterly Key Data Questionnaire

Overall electronic communications network and service revenues at the end of September 2008 were just over €1.11bn for the quarter. Based on this, annualised revenues would be €4.44bn. Industry revenues decreased by 0.4% in this quarter and have fallen by 2.6% compared to Q3 2007. Revenues in all three categories; fixed, mobile and broadcasting declined in this quarter.

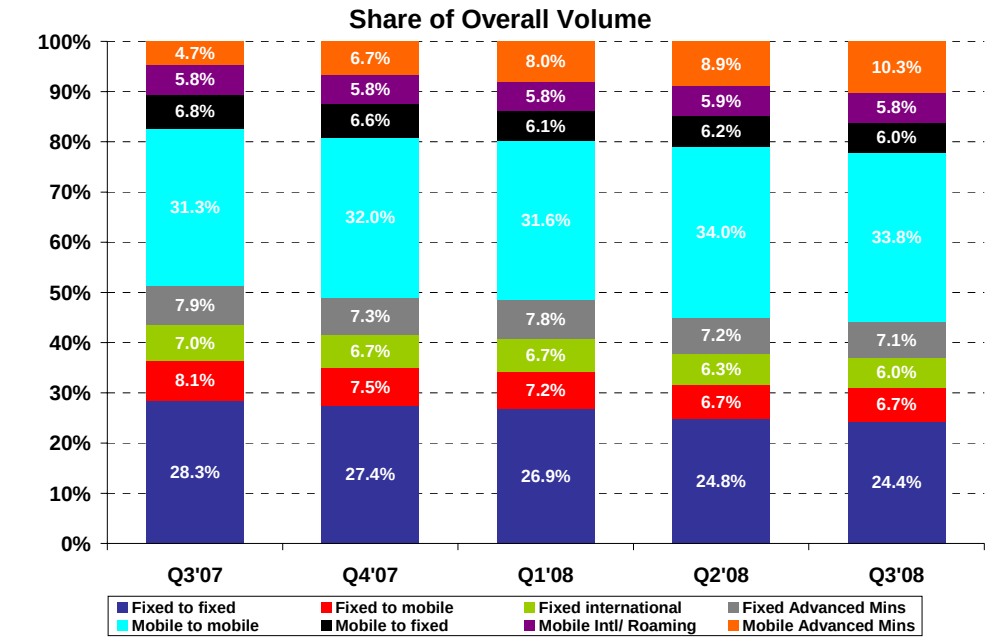
In Q3 2008 fixed line revenues accounted for 51.5% of total electronic communications revenues, a 0.4% point increase since Q2 2008. The mobile industry's share of revenue also increased marginally and is now at 44.1%. Broadcasting revenues have fallen slightly in Q3 2008 and are now 4.4%.

1 For further detail on terms and definitions see ComReg Document Number 08/101a 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).

1.3 Overall Call Volumes

Figure 1.3.1 - Share of Total Voice Call Volumes (Minutes)[3]



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 for the third quarter of 2008 totalled over 5 billion minutes. This was a 2.2% decrease on the previous quarter when total voice minutes were over 5.1 billion minutes. However, since Q3 2007 total voice minutes have increased by 11.6%. Mobile originating voice minutes accounted for 55.9% of all voice minutes while traffic originating on a fixed line network accounted for 44.1% of all voice minutes. Figure 1.3.2 shows the total voice traffic in Ireland at the end of Q3 2008. Both fixed voice and mobile minutes declined in this quarter; fixed voice minutes falling by a more significant margin. However, the 28.2% increase in mobile minutes since Q3 2007 and the 4.1% decrease in fixed voice minutes still suggest that substitution, in terms of usage of voice services, from fixed lines to mobile phones is continuing.

Figure 1.3.2 – Total Voice Traffic

	Q3'08 Mins ('000s)	Quarterly Growth Q2'08 – Q3'08	Year-on-Year Growth Q3'07 – Q3'08
Fixed voice minutes	**2,235,539**	**-4.0%**	**-4.1%**
Mobile voice minutes	**2,830,864**	**-0.7%**	**+28.2%**
Total voice minutes	**5,066,403**	**-2.2%**	**+11.6%**

3 Fixed advanced minutes include premium rate services minutes, freephone minutes, VoB minutes, payphone minutes, operator services minutes, national and international virtual private network minutes. Mobile advanced minutes include premium rate services minutes and other mobile minutes such as voicemail, DQ, call completion minutes etc.

1.4 Pricing Overview

This section examines Ireland's current and previous rankings based on a comparison of prices for specific consumer baskets in a number of EU countries. Data on PSTN[4] and mobile baskets is provided to ComReg by Teligen who use an OECD-approved methodology to compare fixed (PSTN) and mobile tariffs.

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

- the construction of one or more baskets of telephone services (including variable (e.g. calls) and fixed (e.g. rental) charges);
- the pricing of those baskets; and
- 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 19 other EU member states for which data is available since the revision of the OECD baskets in February 2006. Individual pricing charts for each basket for August 2008 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.

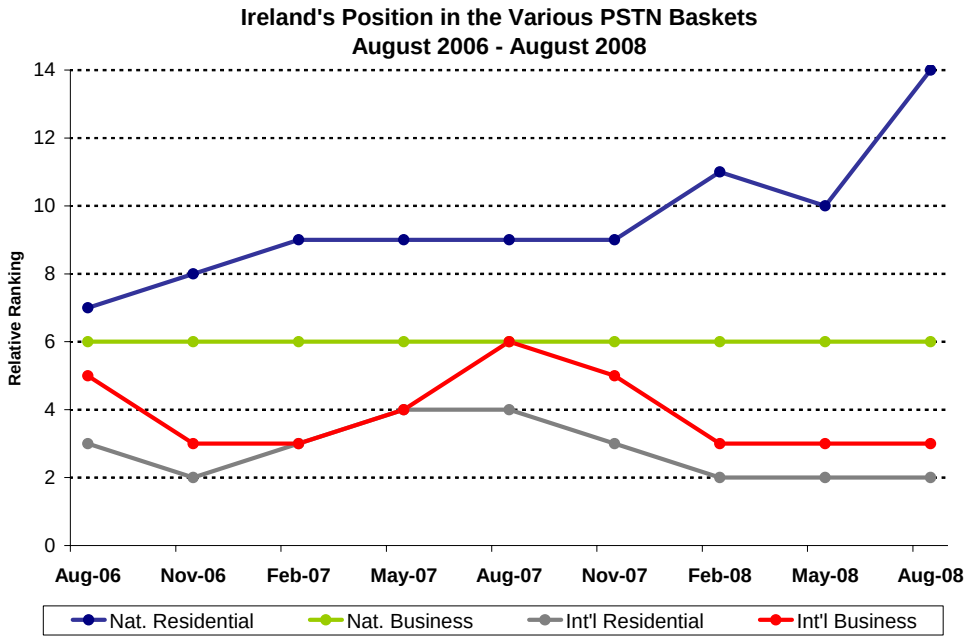
For further information on Teligen's methodology please see the accompanying memorandum ComReg 08/101a.

1.4.1 PSTN Baskets

Figure 1.4.1.1 shows the movement in Ireland's position relative to 18 other EU countries in all PSTN baskets since August 2006, where the least expensive country based on the methodology is ranked 1st. Ireland remains less expensive than the average basket cost across three of the PSTN services analysed. This quarter, Ireland's position in the national residential call basket dropped back by four places to 10th, below the average. Ireland's position in the national business call basket is the same as Q2 2008 (6th). Ireland's position has remained the same for both the international residential and business baskets.

4 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.

Figure 1.4.1.1 – Ireland's Position in the Various PSTN Baskets

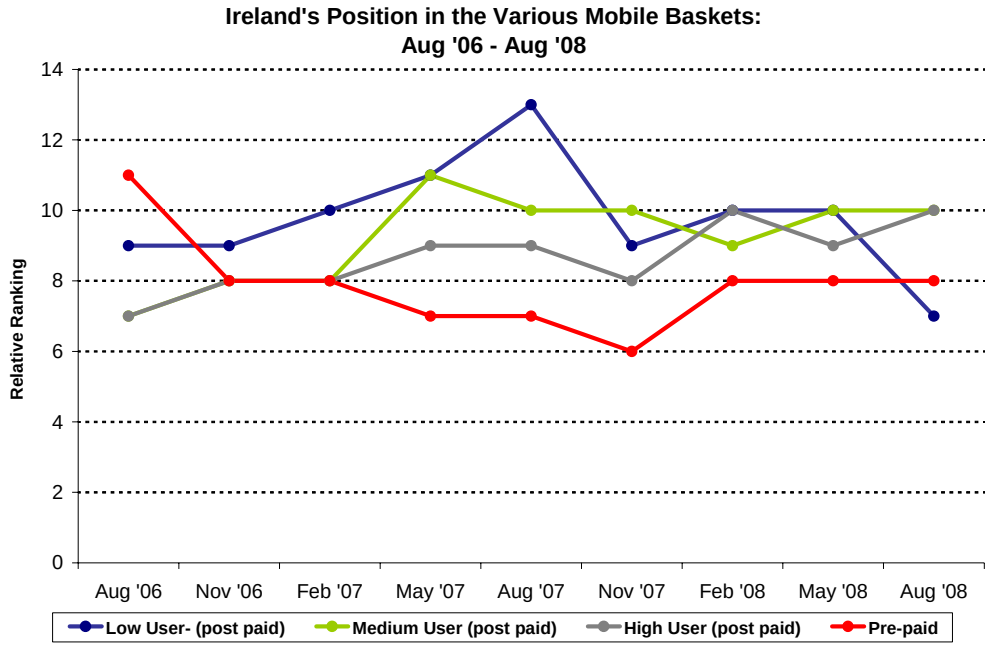


Source: Teligen

1.4.2 Mobile Baskets

Figure 1.4.2.1 shows the movement in Ireland's position in all mobile baskets since August 2006 relative to the other 18 EU countries, where the least expensive country is ranked 1st. Ireland's position in the low user post-paid basket is relatively less expensive than at any time in the last two years, improving by three places to 7th. There was no movement for Ireland since Q2 2008 in the medium user post-paid basket, remaining in 10th position. In the high user post-paid basket Ireland has dropped back to the same position it held in February 2008, 10th. Finally, in the pre-paid basket Ireland's position has not changed over the last two quarters and remains in 8th position.

Figure 1.4.2.1 – Ireland's Position in Various Mobile Baskets



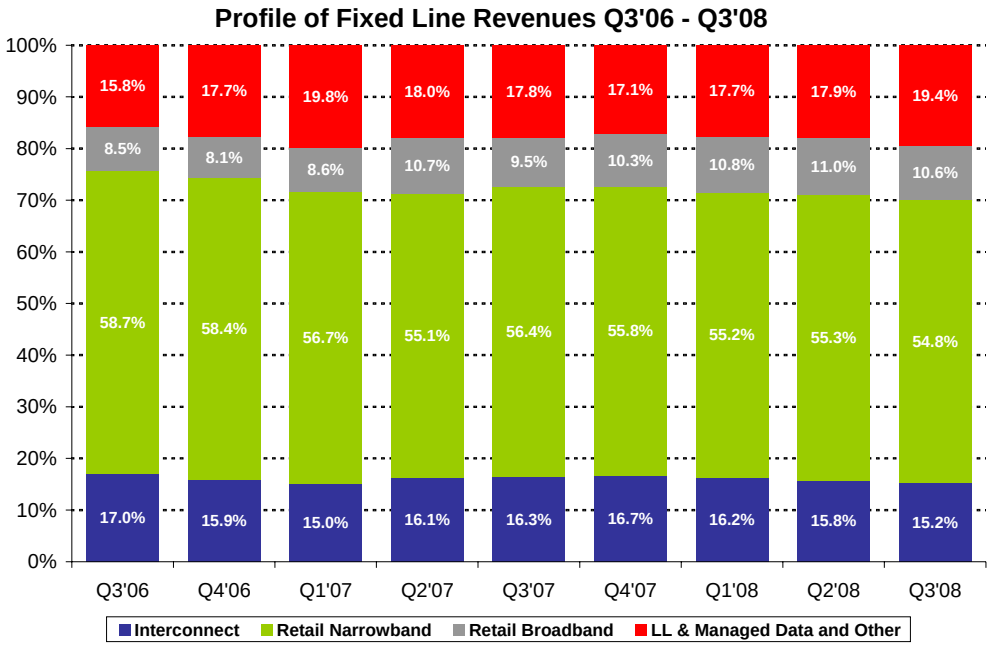
Source: Teligen

2 Fixed Market Data

2.1 Total Fixed Line Revenues

Figure 2.1.1 shows the profile of fixed line revenues in Q3 2008. Total fixed line revenues at the end of September 2008 were just under €572 million. This was a slight decrease (less than 1%) on Q2 2008 revenues, which were almost €574 million. In terms of the share of total fixed revenues, only other retail revenues (from leased lines, managed data and other advanced data services) increased in this quarter. This revenue category increased by 7.7%. Wholesale revenues (from interconnect services) declined in the quarter by 4.1% while both retail narrowband and retail broadband revenues also declined by 1.2% and 3.9% respectively.

Figure 2.1.1 – Profile of Fixed Line Revenues



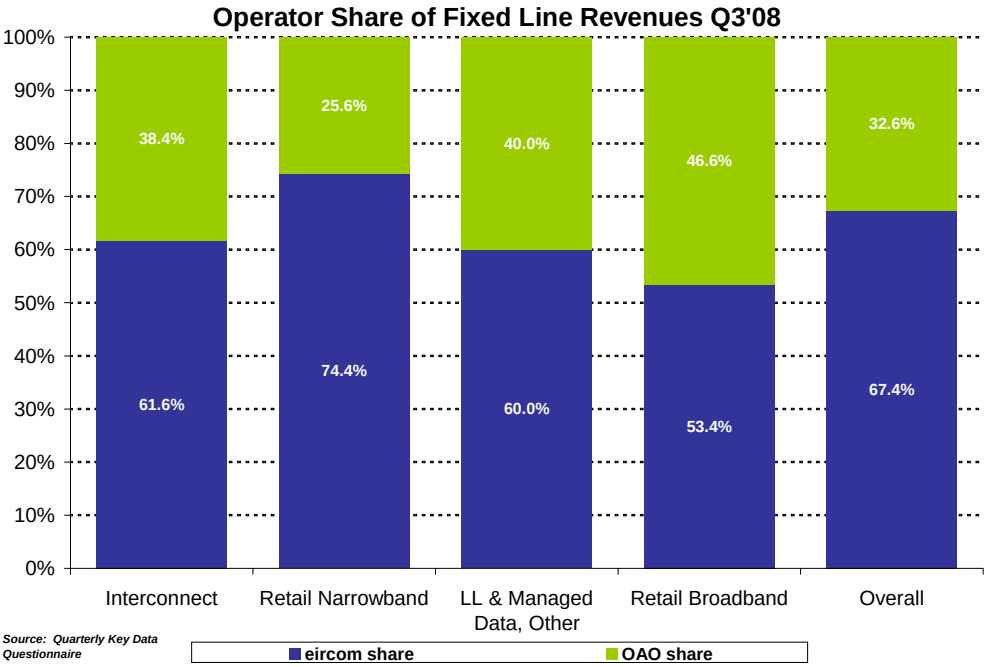
Source: Quarterly Key Data Questionnaire

2.1.1 Authorised Operators' Share of Overall Fixed Line Revenues

Figure 2.1.1.1, below, shows the market shares of the incumbent and other authorised operators (OAOs) in each of the fixed line service categories set out, above, in the chart analysing the profile of fixed line revenues. Market shares are grouped within a number of revenue categories to link related services; however this classification does not necessarily reflect the specific markets identified in ComReg's Market Review process.

This quarter Eircom has made gains in its market share relative to the OAOs in both retail narrowband and retail broadband categories. However, Eircom's retail broadband market share has declined from 57% in Q3 2006 to 53% this quarter. Its retail narrowband market share has fallen from 78% in Q3 2006 to 74% this quarter, while it had 71% market share of other retail revenues in Q3 2006 compared to 60% in Q3 2008.

Figure 2.1.1.1 – Operator Share of Fixed Line Revenues[5]

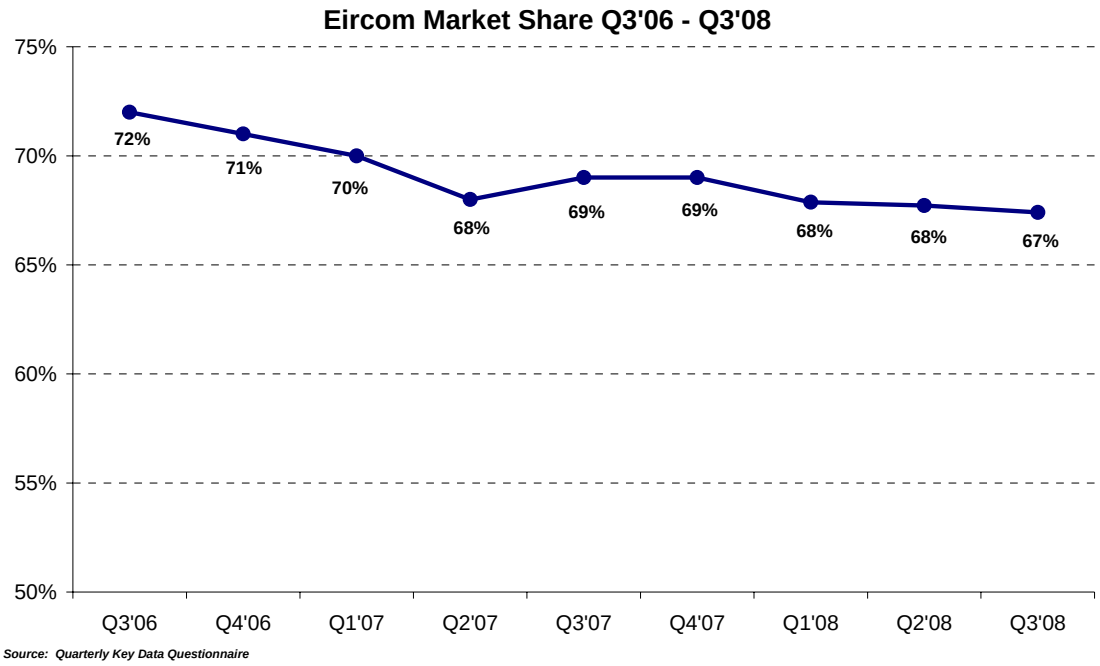


Source: Quarterly Key Data Questionnaire

5 Eircom's retail broadband share includes DSL, FWA and Satellite revenues.

Eircom's overall share of fixed line market revenue fell from 68% in Q2 2008 to 67% in Q3 2008. Eircom's market share has fallen by five percentage points since Q3 2006 and two percentage points since Q3 2007. Figure 2.1.1.2, below, shows Eircom's market share on a quarterly basis from Q3 2006 to Q3 2008.

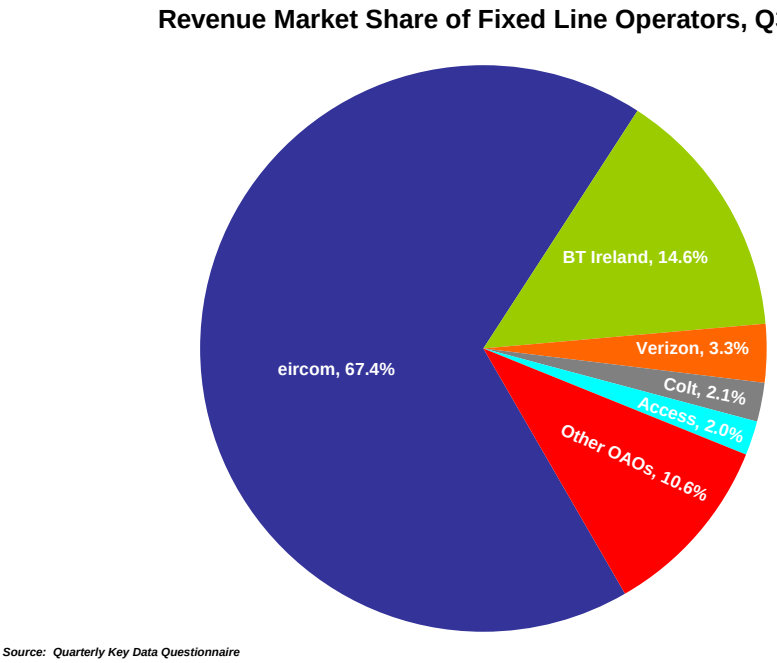
Figure 2.1.1.2 – Eircom's Market Share



Source: Quarterly Key Data Questionnaire

Figure 2.1.1.3, below, outlines revenue market share in Q3 2008 by breaking out the total fixed market in terms of revenue shares held by the incumbent fixed line operator, OAOs with a 2% or greater market share, and all other OAOs.

Figure 2.1.1.3 – Revenue Market Share of Fixed Line Operators



Source: Quarterly Key Data Questionnaire

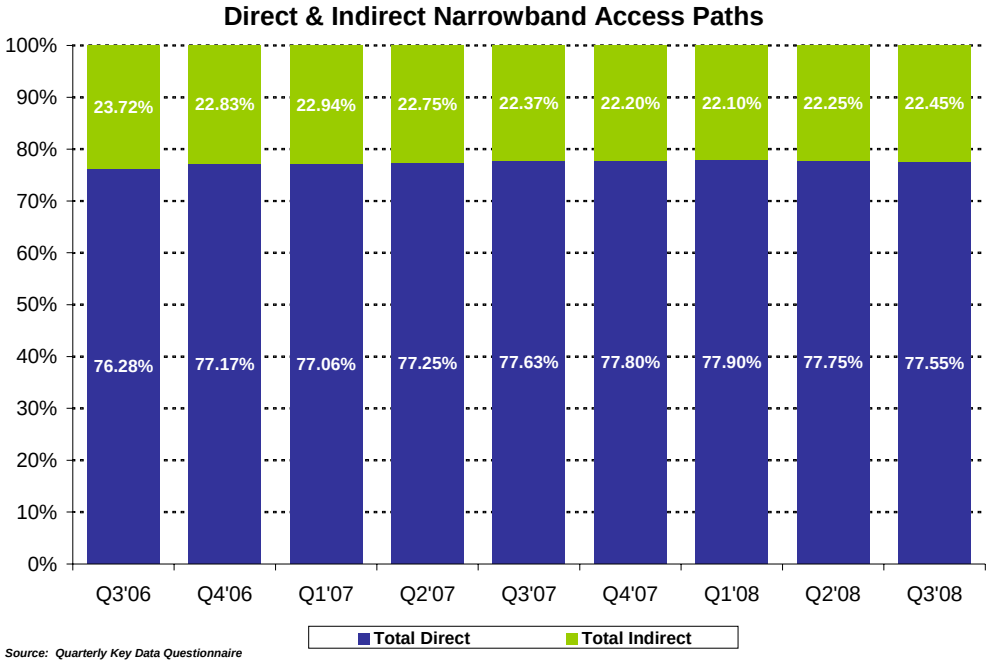
After Eircom, the largest revenue-earning operator in the market with just over 67% of the market share, ComReg estimates that the next four largest operators (BT Ireland, Verizon, Colt and Access), in terms of revenue, contribute a further 22% of industry revenue. The remaining market share is generated by all other operators in the fixed line market. This chart is presented as an additional analysis of the fixed market and should not be interpreted as a definitive statement of market shares, in particular fixed line market segments.

2.2 Fixed Line Access Paths

2.2.1 Access Paths

Figure 2.2.1.1 presents the total number of narrowband fixed access paths (PSTN and ISDN) broken out by direct and indirect access[6]. These paths are used for voice services and dial up internet access. There were just under 2.1 million direct and indirect PSTN and ISDN access paths in the Irish market in Q3 2008. Over the last four years the number of access paths has grown by 5.4% in that period. Total narrowband access paths declined slightly (less than 1%) in Q3 2008. In Q3 2008, indirect access accounted for 22.5% of all access paths in the fixed market.[7] This was a slight increase on the previous quarter, although this figure has remained relatively constant for the last two years. While this chart shows the number of narrowband only access paths in Ireland, voice and data can also be supplied by other means such as broadband. Details on the broadband market in Ireland can be found in chapter 3 of this report.

Figure 2.2.1.1 – Direct & Indirect Narrowband Fixed Access Paths



Source: Quarterly Key Data Questionnaire

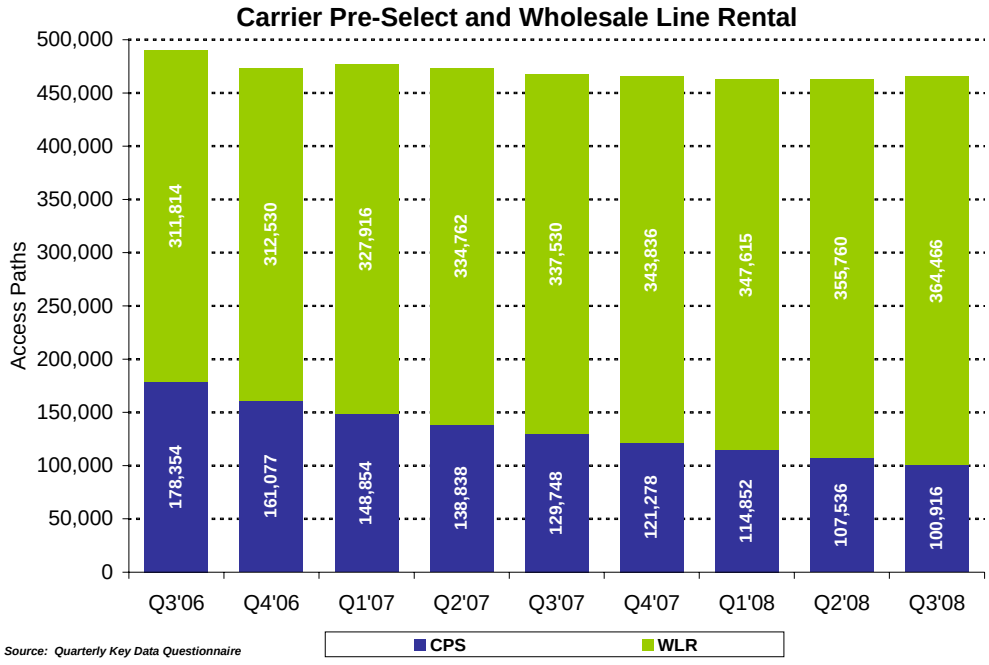
6 Indirect access paths relate to telephone lines provided to customers by means of carrier pre-select only or wholesale line rental. Carrier pre-select allows the user to receive all or a portion of calls from one provider and line rental from another provider (usually Eircom). Wholesale line rental (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.

7 Access paths are not synonymous with access lines as for example in the case of ISDN paths, there may be more than 1 path provided via a single ISDN line.

2.2.2 Indirect Access Paths

Figure 2.2.2.1 illustrates the overall number of PSTN and ISDN paths provided by means of either Carrier Pre-Selection (CPS) only or Wholesale Line Rental (WLR). In Q3 2008, there were over 465,000 indirect access paths in Ireland. The number of indirect access paths grew by 0.5% since Q2 2008. However, over the last two years, the number of indirect access paths has declined by 5%, and in the last twelve months the drop in indirect access paths has been just under 0.5%. This chart shows how OAOs are continuing to migrate their customer base to single-bill services, i.e. WLR rather than CPS (i.e. calls only) services to customers. WLR managed by OAOs now account for 78.3% of indirect access paths compared to 63.6% in Q3 2006. This is in contrast to CPS which has declined by almost fifteen percentage points over the same period.

Figure 2.2.2.1 – Narrowband Indirect Access Paths



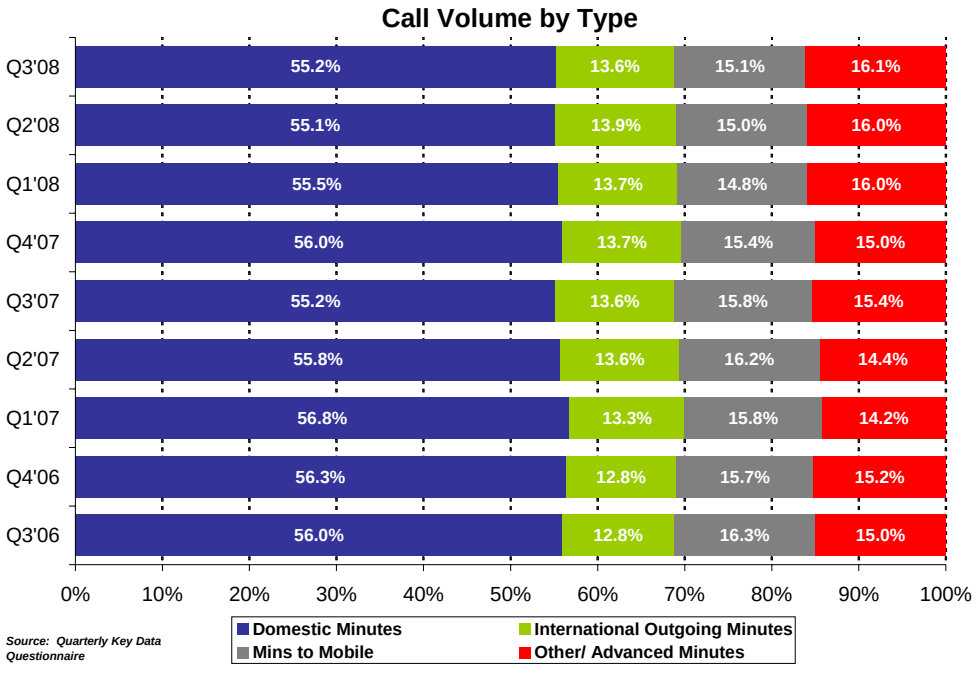
Source: Quarterly Key Data Questionnaire

2.3 Fixed Voice Call Volumes

Fixed call traffic in Q3 2008 was just over 2.23 billion minutes, which was a 4% decrease since Q2 2008 and a fall of 4.1% since Q3 2007. Voice over broadband minutes now account for approximately 1.26% of this total. ComReg data, provided by operators, shows over 28.1 million VoB minutes for Q3 2008, a decline of approximately 30% on Q2 2008.

Only traffic accounted for under the category "other minutes" saw an increase, albeit marginal (less than 1%), this quarter relative to twelve months ago. The other three categories have all seen declines in traffic, year-on-year. Minutes to mobile have dropped by 8.4% since Q3 2007, while international outgoing minutes and domestic minutes have both declined by approximately 4% in the last twelve months. Since this analysis began in Q4 2004, the percentage split between domestic, international, mobile minutes and other minutes has revealed a slow decline in the percentage of fixed to mobile minutes and domestic minutes in particular. 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 increased fixed-mobile substitution. Figure 2.3.1 illustrates trends in fixed voice call minutes since Q3 2006.

Figure 2.3.1 – Fixed Voice Call Volume (Minutes)[8]



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

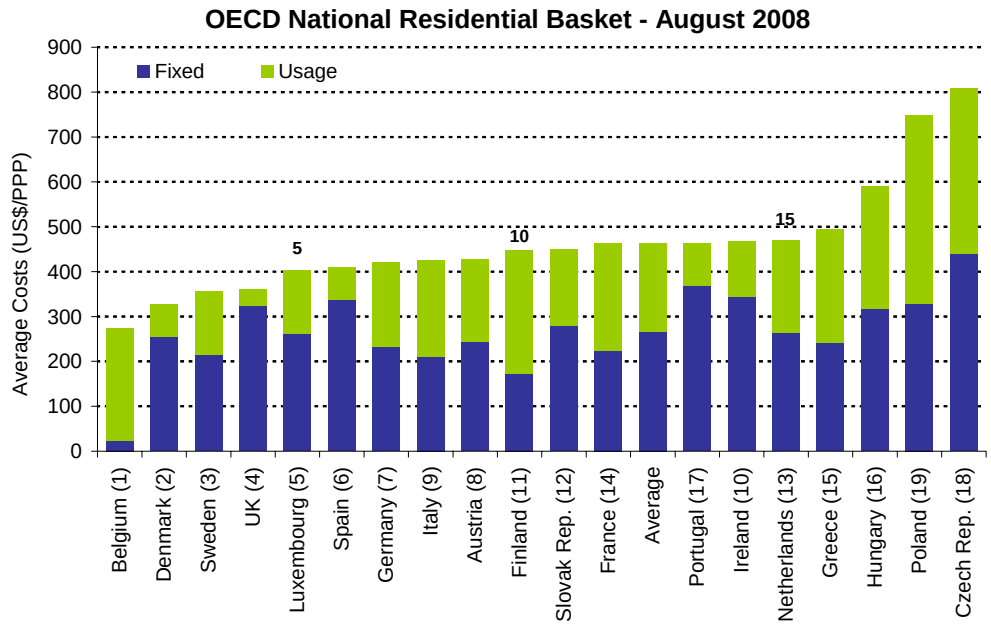
2.4 PSTN Pricing Data

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 countries for which data is available[9]. Using this methodology, data is presented using USD ($) and Purchasing Power Parities (PPPs). The latter provides an indication of the cost of telecoms services in countries analysed in relation to the cost of all other products and services, and takes account of exchange rate differences.

2.4.1 OECD National Residential Basket

Figure 2.4.1.1 illustrates Ireland's ranking, alongside the other 18 EU countries, 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 incumbent package available for a specific customer usage profile. In many cases this will be a bundled service which will include both line rental and a "bundle" of call minutes for a fixed monthly charge. It should therefore be noted that the "fixed" element in this basket is not an indication of the cost of basic line rental. In August 2008 Ireland ranked in 14th position, just behind the average of the 19 EU countries in terms of the most competitive pricing for this basket. This represents a decline of four places in Ireland's position since May 2008.

Figure 2.4.1.1 - OECD National Residential Basket – August 2008[10]



Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at May 2008

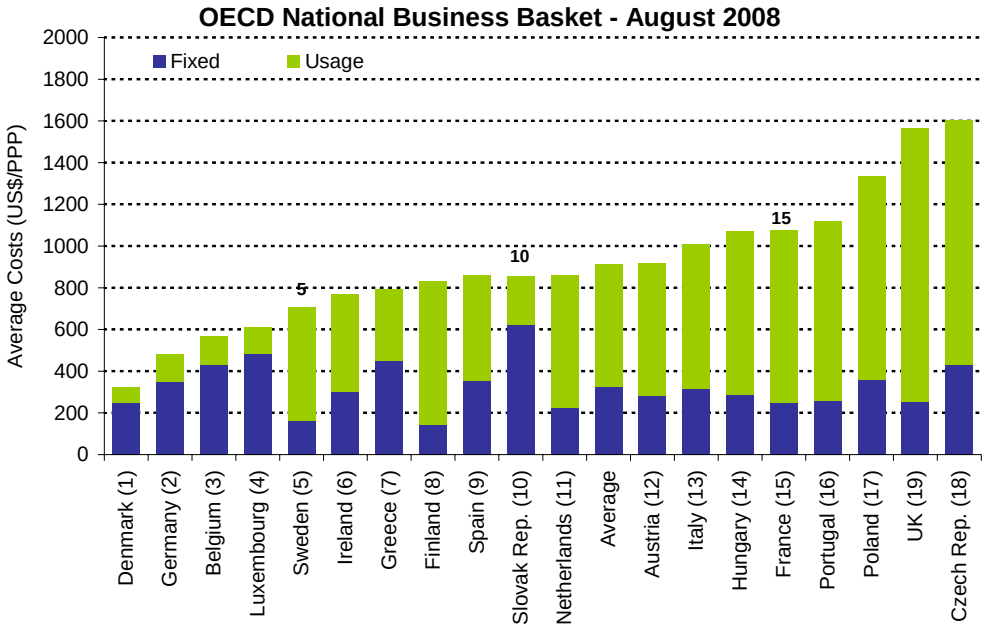
9 This will be determined by whether the EU country is also an OECD member.

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

2.4.2 OECD National Business Basket

As with the residential basket, the chart below is based on a comparison of the cheapest incumbent business package 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 be noted that the "fixed" element in this basket is not an indication of the cost of basic line rental. Ireland remains in 6th position in the rankings, ahead of the average for the 19 EU countries.

Figure 2.4.2.1 - OECD National Business Basket – August 2008

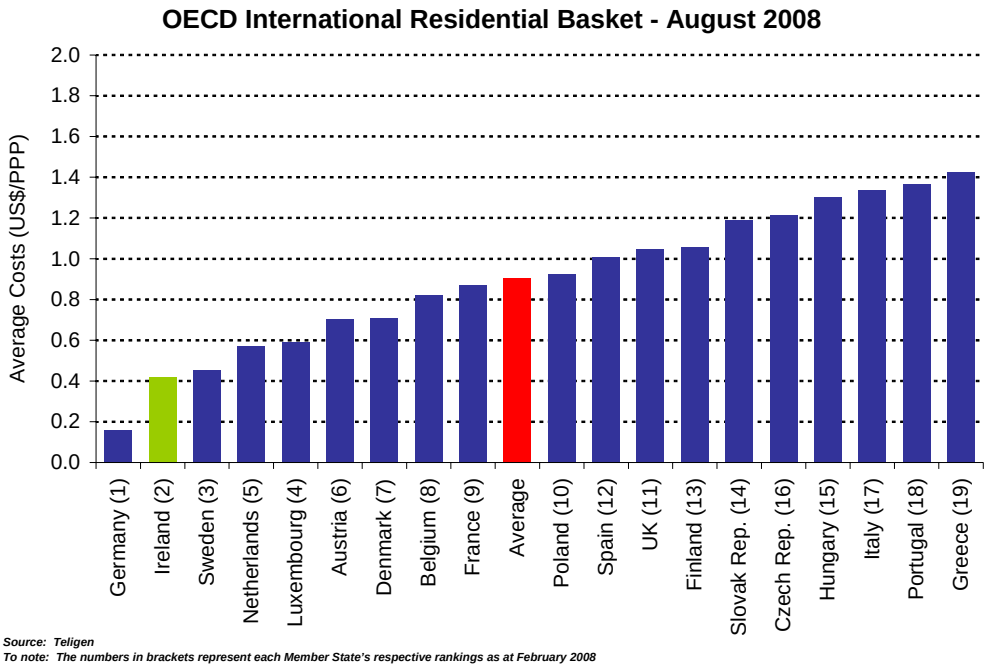


Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at May 2008

2.4.3 OECD International Residential Basket

Figure 2.4.3.1 ranks the 19 EU countries based on the cost of residential three-minute peak international calls and five-minute off-peak international calls from one country to all other countries in the basket. The chart presented in the last Quarterly Report (ComReg 08/75) used incorrect data for Germany. Therefore the comparison in this chart is between August and February 2008. It shows that Ireland remains in second position, its average cost remaining fairly constant.

Figure 2.4.3.1 - OECD International Residential Basket – August 2008[11]



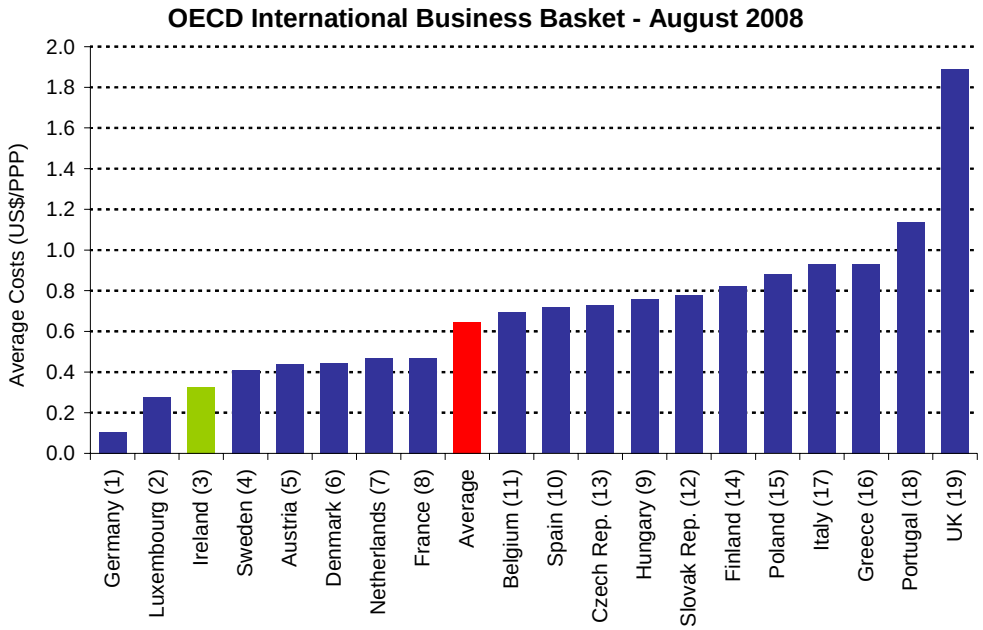
Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at February 2008

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

2.4.4 OECD International Business Basket

As with the previous chart, figure 2.4.4.1 ranks the 19 EU countries based on the cost of business three-minute peak international calls and five-minute off-peak international calls from one country to all other countries in the basket. The chart presented in the last Quarterly Report (ComReg 08/75) used incorrect data for Germany. Therefore the comparison in this chart is between August and February 2008. Ireland remained in 3rd place in this basket in August 2008. Ireland remains well below the average of the 19 EU countries.

Figure 2.4.4.1- OECD International Business Basket – August 2008



Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at February 2008

3 Internet and Broadband

3.1 Total Internet Subscriptions

At the end of Q3 2008, there were over 1.38 million active internet subscriptions in Ireland. This is a 3.2% growth on the previous quarter and a 17.9% increase on the same period last year. Overall, narrowband subscriptions continued to decline in Q3 2008, with flat rate narrowband falling by 10.5% and metered narrowband decreasing by 9.4%. Total broadband subscriptions continued to grow strongly in this quarter, up by 6.7% since Q2 2008. Mobile broadband (HSDPA) continues to show strong signs of growth and increased by 20.9% in Q3 2008. Figure 3.1.1 shows the total number of narrowband and broadband subscriptions to internet services in Ireland.

Figure 3.1.1 – Total Number of Active Internet Subscriptions in Ireland

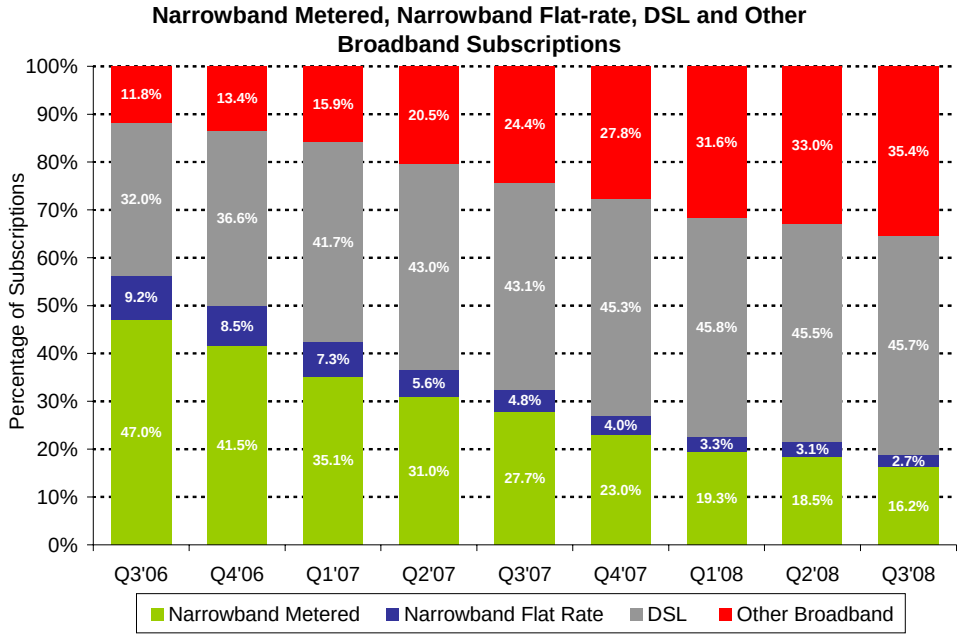
Subscription Type	Q3'08 Subs	Quarterly Growth Q2'08-Q3'08	Year-on-Year Growth Q3'07-Q3'08
Metered Narrowband	224,722	-9.4%	-31.1%
Flat Rate Narrowband	36,856	-10.5%	-34.9%
DSL Broadband[12]	633,536	+3.6%	+24.9%
Other Broadband[13]	491,544	+10.9%	+71.5%
Total Internet Subscriptions	1,386,658	+3.2%	+17.9%

12 DSL refers to a digital subscriber line, the means by which broadband speeds (i.e. in excess of 144k downstream) are delivered over the copper telecoms network.

13 Other Broadband includes cable broadband, fixed wireless access, fibre, satellite and mobile broadband connections.

Figure 3.1.2 profiles internet subscriptions in Ireland using the classifications of subscription type outlined in table 3.1.1. Broadband subscriptions, account for 81.1% of all internet subscriptions. Figure 3.1.2 provides a profile for the periods Q3 2006 – Q3 2008 for historical trend purposes. However, the inclusion of mobile broadband subscriptions in the 'Other Broadband' category from Q2 2007 means quarter on quarter comparisons should not be drawn between the current period and data prior to Q2 2007 profiled in Figure 3.1.2.

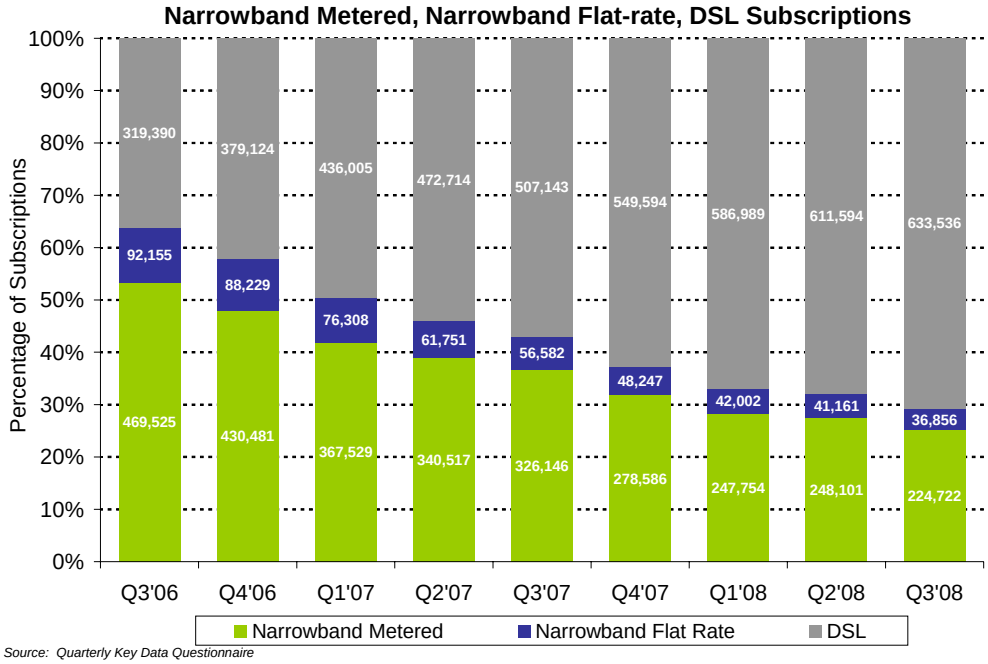
Figure 3.1.2 – Profile of Active Internet Subscriptions in Ireland



Source: Quarterly Key Data Questionnaire

Figure 3.1.3 profiles only those internet subscriptions delivered 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 895,114 active internet subscriptions over the copper telecoms network at the end of September 2008, a decrease of 5,742 (0.6%) in the total number of copper-based subscriptions since Q2 2008. DSL accounted for 70.8% of copper-based internet subscriptions, while metered narrowband subscriptions accounted for a further 25.1% of internet subscriptions over copper, with flat rate narrowband internet subscriptions making up the remaining 4.1% of copper-based internet subscriptions.

Figure 3.1.3 – Profile of Copper Based Internet Subscriptions

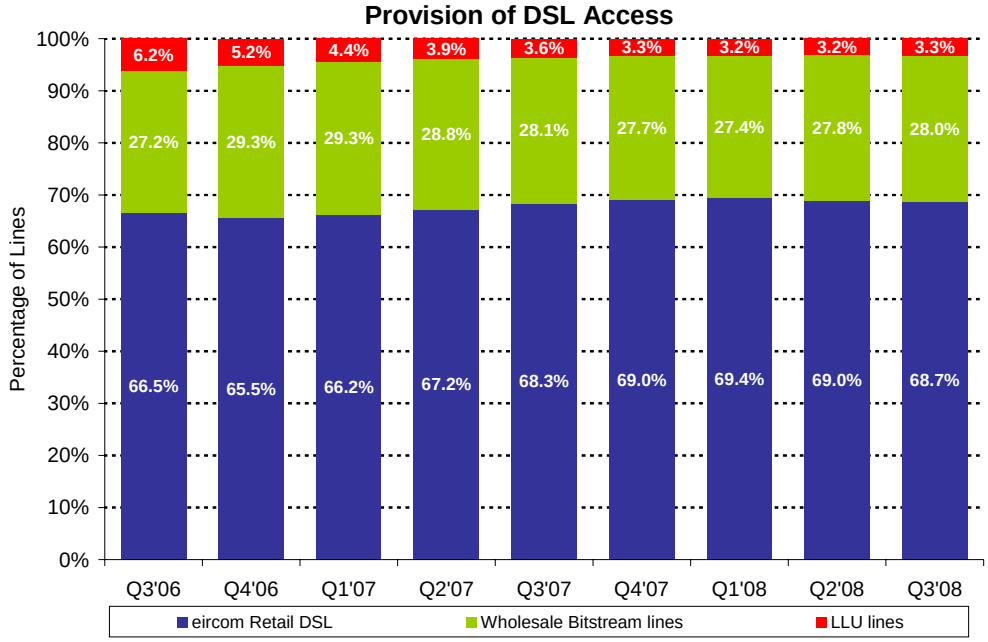


Source: Quarterly Key Data Questionnaire

3.2 Provision of DSL Access

Figure 3.2.1 examines the provision of DSL access. DSL broadband services are provided to consumers by operators using three alternative methods of access. DSL may be provided directly to the consumer by eircom using direct access to its network; this accounted for 68.7% of all DSL subscriptions in September 2008. Retail DSL may also be provided by alternative operators (OAOs) who use either wholesale bitstream, which enables OAOs to resell eircom's DSL service, or by offering DSL-based broadband using local-loop unbundling (LLU). At the end of September 2008, 28% of all DSL lines were provided by OAOs using wholesale bitstream, and the remaining 3.3% of DSL lines were provided to subscribers by OAOs using local-loop unbundling. At the end of September 2008 there were 20,770 local loops unbundled. This represents an increase of 6.1% since Q2 2008. Eircom's market share of retail DSL lines has fallen slightly over the last two quarters.

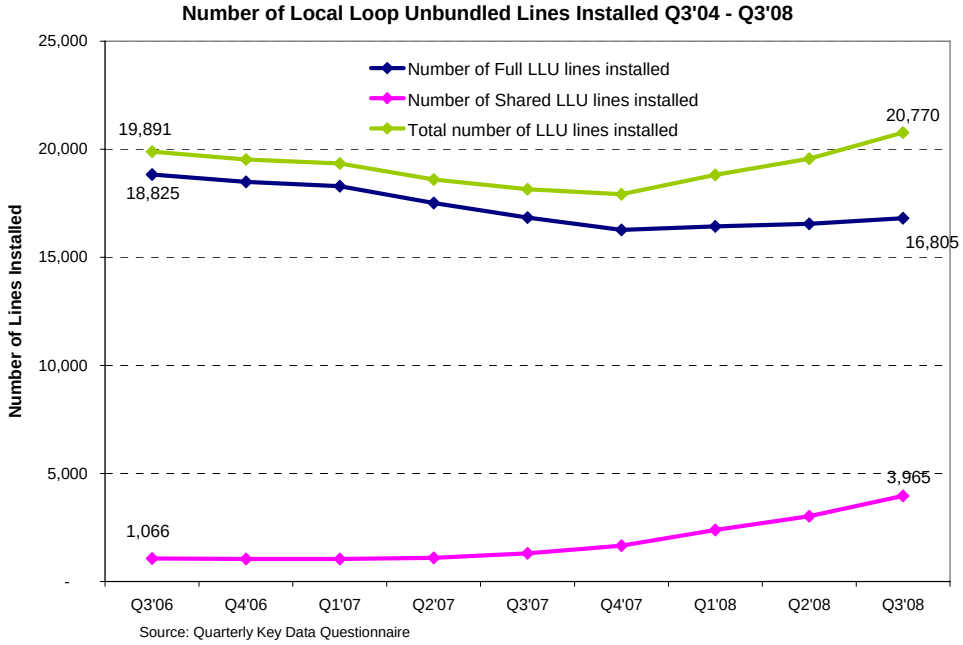
Figure 3.2.1 - Provision of DSL Access



Source: Quarterly Key Data Questionnaire

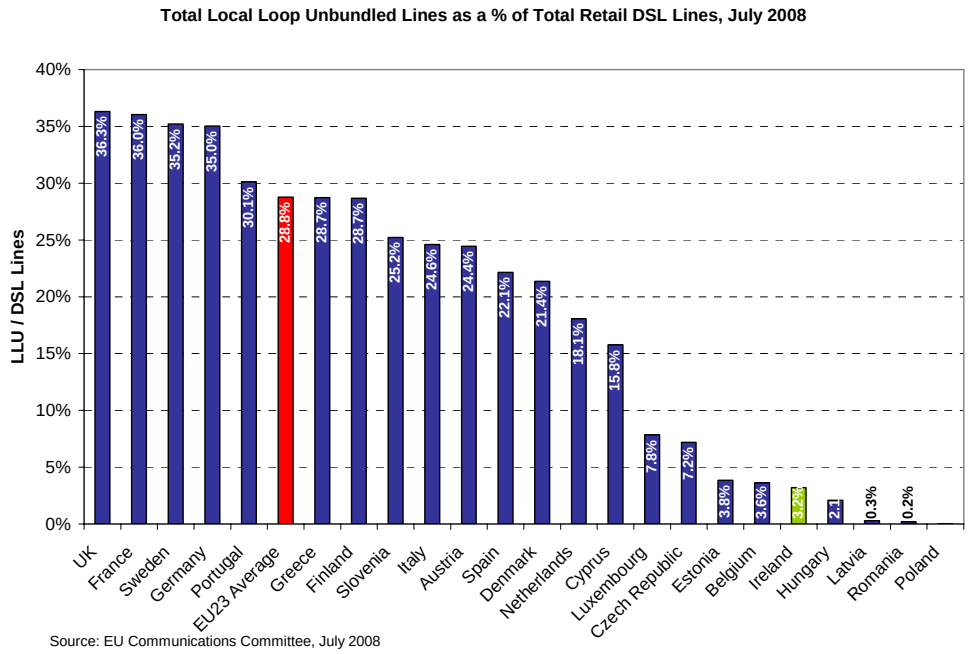
Figure 3.2.2 shows the number of local loop unbundled lines classified by shared and full status. The total number of LLU lines have increased over the last three quarters reversing a downward trend since Q3 2006. The proportion of shared lines continue to increase steadily.

Figure 3.2.2 – Number of Local Loops Unbundled



Although the number of LLU lines has increased in the last three quarters Figure 3.2.3 shows that Ireland lags the EU average in terms of of LLU lines as a proportion of total retail DSL lines. 3.2% of Ireland's retail DSL lines are unbundled compared to an EU average of 28.8%.

Figure 3.2.3 – Number of Local Loops Unbundled as a % of total Retail DSL Lines



Source: EU Communications Committee, July 2008

3.3 Provision of Broadband Services

Figure 3.3.1 summarises the total number of broadband subscriptions at the end of the quarter by access technology.

Figure 3.3.1 – Broadband Subscriptions[14] and growth rates by Platform

Platform	Q3'08 Subs	Quarterly Growth Q2'08 – Q3'08	Year-on-Year Growth Q3'07 – Q3'08
DSL	633,536	+3.6%	+24.9%
Cable	95,442	+4.4%	+24.1%
FWA	117,802	-2.1%	+4.2%
Other[15]	9,595	+3.9%	+16.40%
Sub-Total	856,375	+2.9%	+21.4%
Mobile Broadband	268,705	+20.9%	+203.9%
Total	1,125,080	+6.7%	+41.8%

High Speed DownLink Packet Access (HSDPA) provides mobile broadband access to a growing number of Irish consumers. In order to fully reflect the range of broadband services available to customers in Ireland, ComReg started to include this data in its overview of the market before the Q2 2007[16] report.

At the end of September 2008, there were 1,125,080 broadband subscriptions in Ireland. This represents a growth rate of 6.7% in the number of subscriptions for this quarter. FWA subscriptions continued to decline in Q3 2008 by 2.1% while mobile broadband was the fastest growing platform, growing by 20.9% in Q3 2008. Between Q3 2007 and Q3 2008 mobile broadband subscriptions have increased by 203.9%.

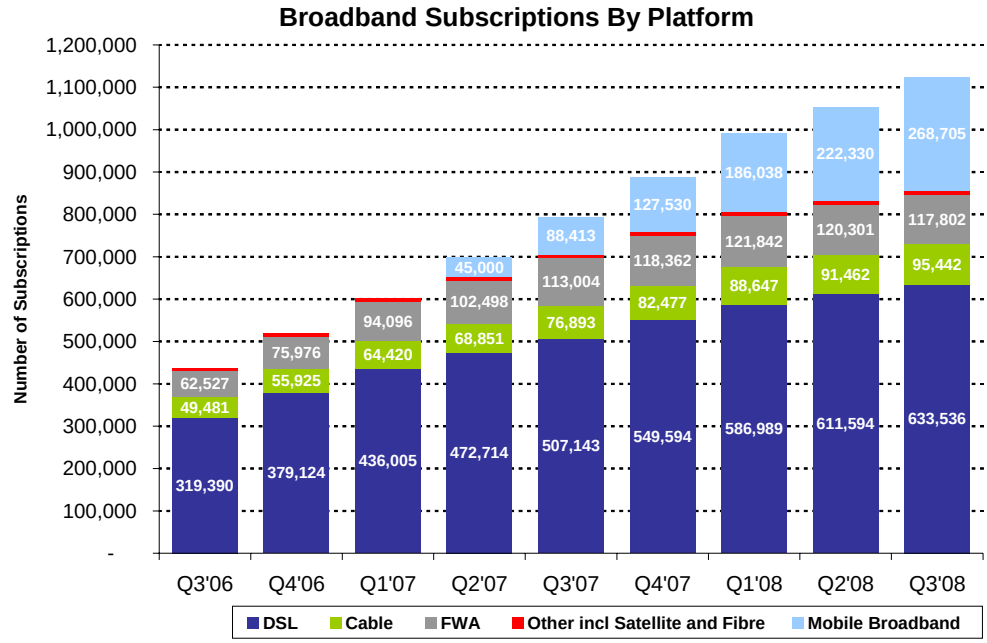
14 ComReg notes that the data provided in this section relates to active subscriptions reported by operators. It takes into account multiple active subscriptions to broadband offerings by individual subscribers.

15 Other Broadband includes Satellite and Optical Fibre broadband subscriptions.

16 In Q2 2007 an estimate of 45,000 mobile broadband subscriptions was used.

DSL remains the largest broadband access platform in terms of subscriptions, accounting for 56.3% of all broadband subscriptions, while other platforms account for the remaining 43.7% of connections. Figure 3.3.2 illustrates the growth in total broadband subscriptions in the Irish market since Q3 2006. Mobile broadband subscriptions were included in Figure 3.3.2 for the first time in Q2 2007. Therefore total subscriptions levels from Q2 2007 presented in Figure 3.3.2 are not directly comparable with previous periods.

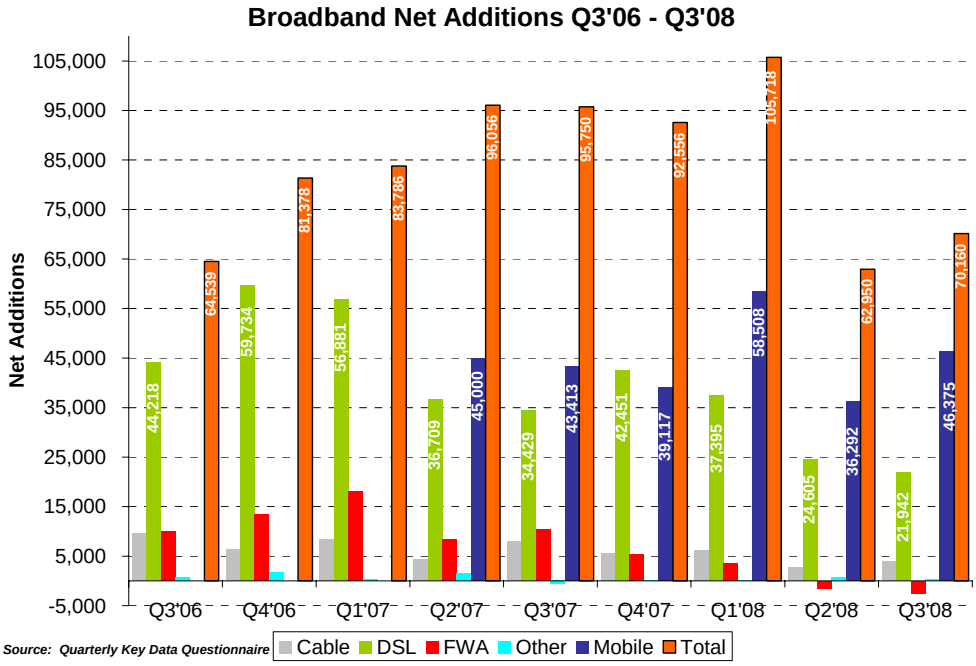
Figure 3.3.2 – Broadband Subscriptions by Platform



Source: Quarterly Key Data Questionnaire

Figure 3.3.3 shows the number of broadband net additions by platform for each quarter since 2006. Although DSL remains the main means of broadband access to the internet, mobile broadband was the largest contributor to new broadband growth in Q2 and Q3 2008. Mobile broadband grew by over 46,375 customers followed by DSL which grew by 21,942 customers. Between Q3 2006 and Q3 2008, new DSL additions to broadband reached a peak in Q4 2006 while FWA reached a peak, in terms of new additions, in Q1 2007. While all other platforms have grown this quarter FWA subscriptions have declined by almost 2,500 subscriptions.

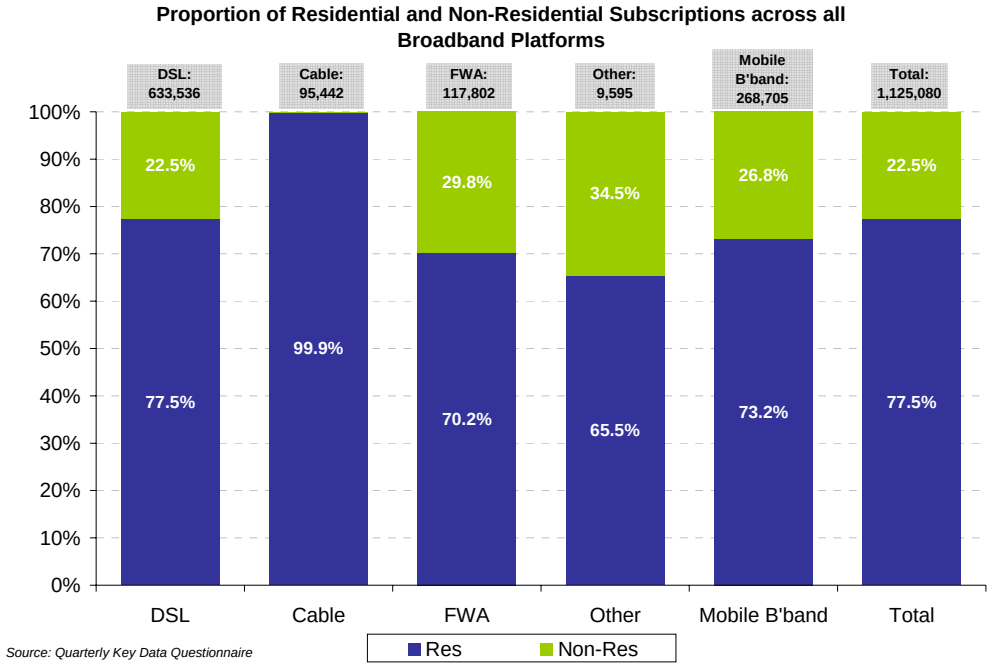
Figure 3.3.3 – Total Broadband Net Additions, 2006 - 2008



Source: Quarterly Key Data Questionnaire

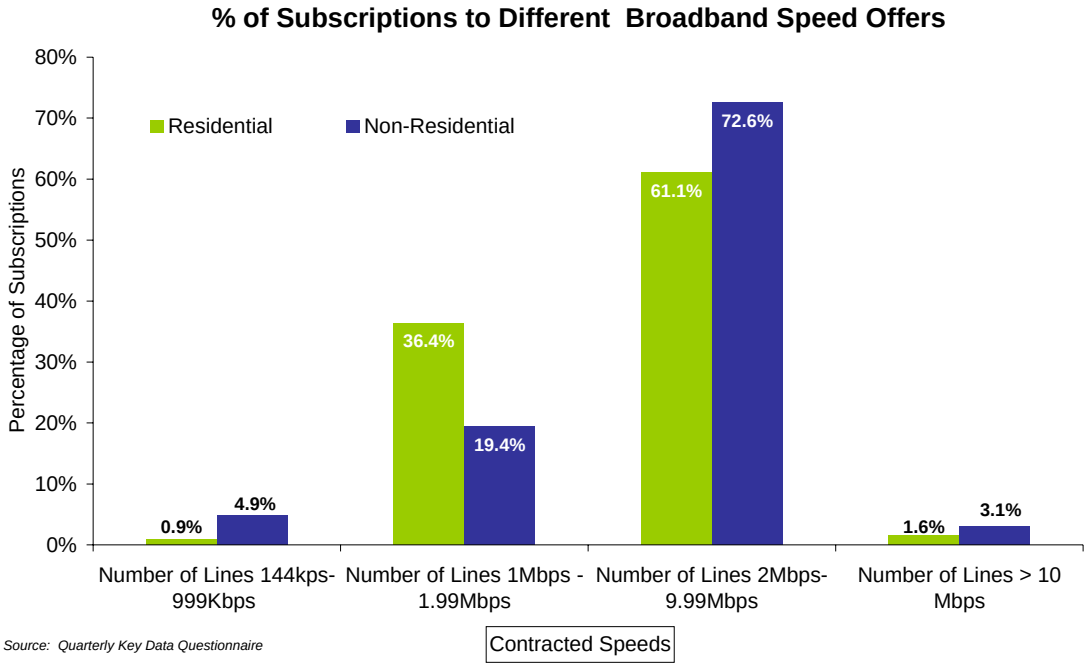
Figure 3.3.4 provides an estimate of the proportion of business and residential subscriptions to DSL, cable, fixed wireless, mobile broadband, fibre and satellite broadband services. At the end of September 2008, 77.5% of broadband subscriptions on all platforms were residential broadband subscriptions. The platform with the highest percentage of residential subscriptions is cable broadband, while satellite and fibre broadband lines (classified as "Other") have the highest percentage split of business customers.

Figure 3.3.4 – Broadband Subscriptions by Subscription Type



ComReg provides a breakdown of broadband subscriptions by contracted speed across all broadband platforms. Figure 3.3.5 illustrates that both residential and business users are more likely to subscribe to packages of between 2Mbps - 10Mbps. The trend of customers moving to higher speeds has continued in Q3 2008 with significant increases in both residential and non-residential subscriptions in the 2Mbps – 10Mbps range. There was a slight increase in the >10Mbps range while the percentage of subscriptions in the 144kbps – 1.99Mbps range has declined for residential users.

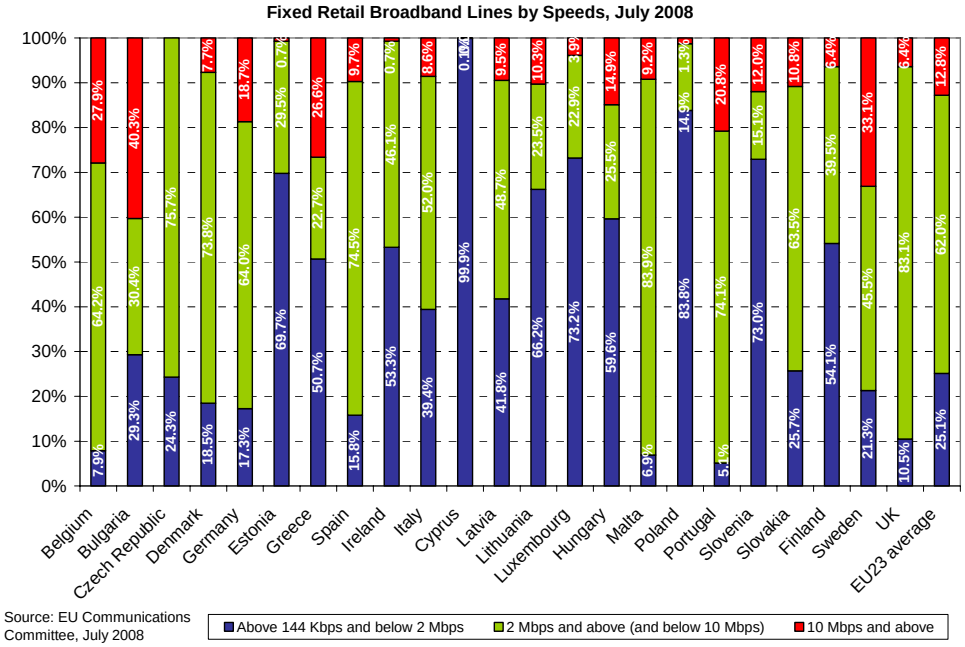
Figure 3.3.5 – Broadband Subscriptions by Contracted Download Speeds



Source: Quarterly Key Data Questionnaire

Figure 3.3.6 provides a summary of broadband lines (excluding mobile broadband) by speed category as of 1st July 2008. For the majority of EU countries, the speed category that is most frequently subscribed to is the 2Mbps – 10Mbps range.

Figure 3.3.6 – Broadband Subscriptions by Speed

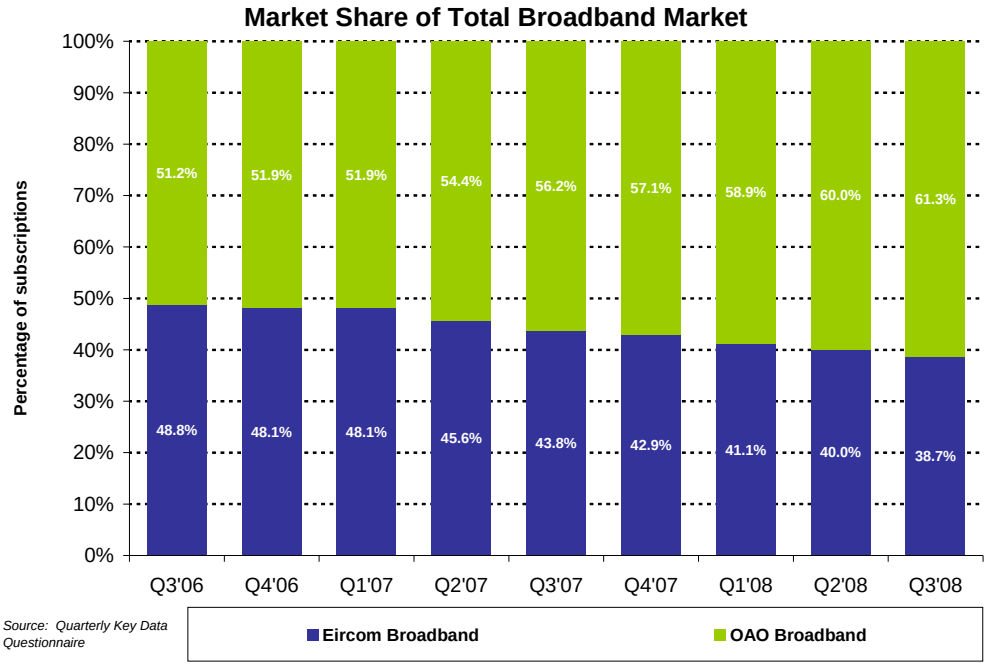


Source: EU Communications Committee, July 2008

Figure 3.3.7 illustrates eircom's market share of total broadband subscriptions when compared to other authorised operators' (OAO) share of overall broadband subscriptions, including DSL and alternative access technologies (which includes mobile broadband subscriptions).

In this period, eircom's market share was 38.7% for retail broadband subscriptions.The remaining 61.3% of subscriptions was held by operators on alternative broadband platforms which include cable broadband, fixed wireless, fibre, satellite and mobile broadband subscriptions. Please note that data from Q2 2007 cannot be compared to previous quarters as it includes mobile broadband for the first time. Data prior to Q2 2007 is included here for illustration of previous trends.

Figure 3.3.7– Market share of Total Broadband Market



Source: Quarterly Key Data Questionnaire

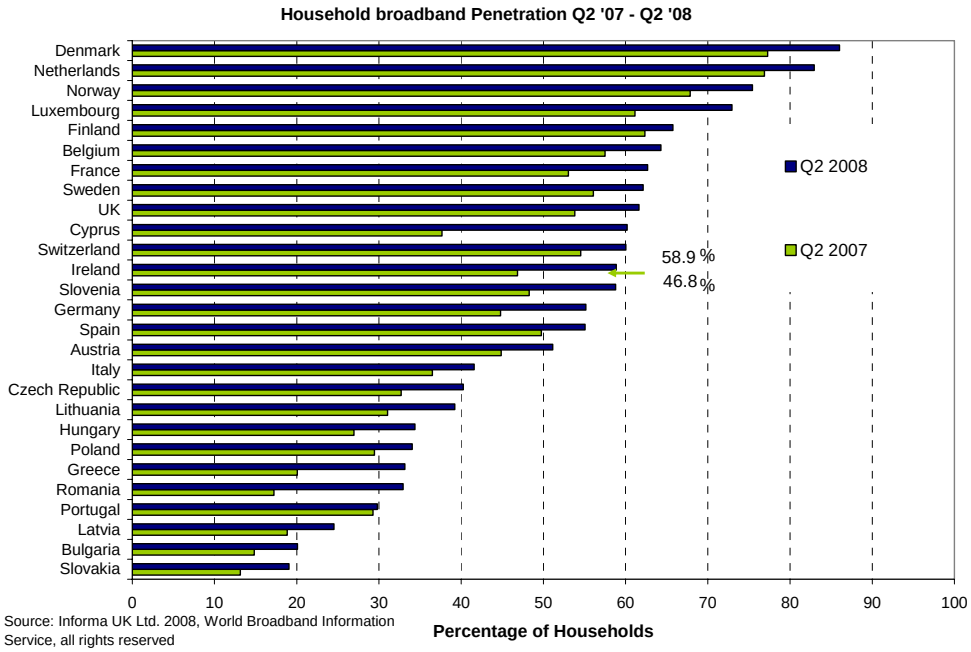
In presenting broadband penetration benchmarks for European countries, ComReg uses the OECD, the European Competitive Telecoms Association (ECTA) or European Commission data. ComReg will endeavour to publish this data on a quarterly basis as detailed in Figure 3.3.8. The data presented is based on the most recently published statistics at the time of publication.

Figure 3.3.8 – Broadband Data Sources

Source	Publish Date	Data Period as of	Included in ComReg Quarterly Report
ECTA	February 2009	September 2008	Q4'08
OECD	April 2009	December 2008	Q1'09
ECTA	September 2009	March 2009	Q2'09
OECD	October 2009	June 2009	Q3'09

Figure 3.3.9 illustrates a year on year, cross country comparison of household broadband penetration rates calculated by Informa at the end of Q2 2007 and Q2 2008. Ireland's household broadband penetration rate on the basis of 1,537,950 households was 58.9% as of June 2008, compared to 46.8% the previous year. Based on the penetration data used by Informa, Ireland ranks 12th among the 27 countries benchmarked, while Denmark and the Netherlands have the highest household broadband penetration rates at 86% and 82.9% respectively.

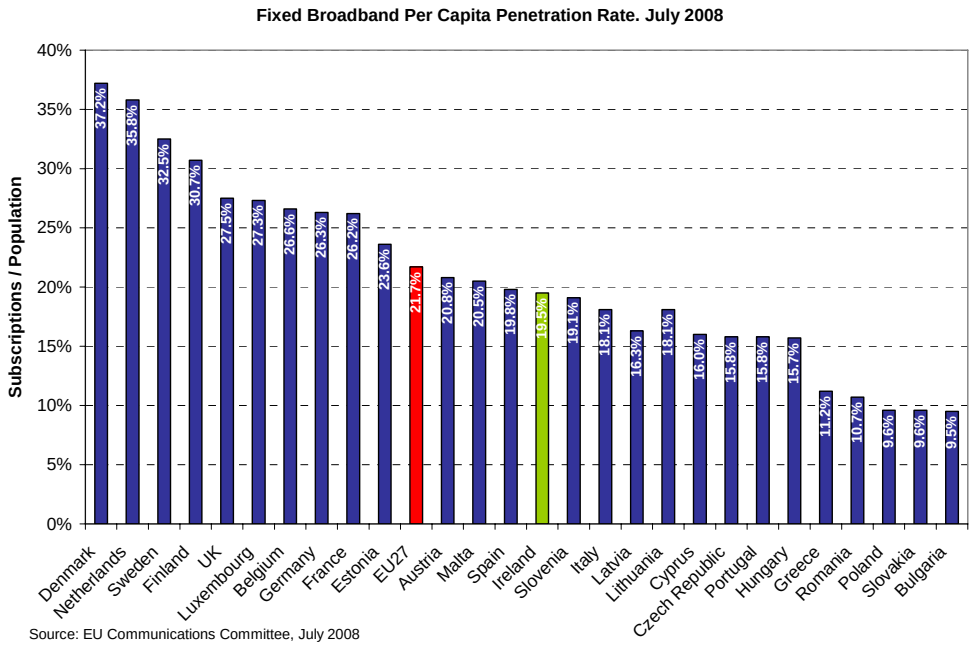
Figure 3.3.9 – EU Household Broadband Penetration Rates Q2'07-Q2'08



The total number of broadband subscriptions in Ireland for Q3 2008 was 1,125,080. This was a 6.7% increase since Q2 2008. The broadband per capita penetration rate in Q3 2008 was 25.9%. Without mobile broadband, the penetration rate was 19.7%. These figures are based on a population of 4,339,000 sourced from CSO data.[17]

Figure 3.3.10 illustrates fixed broadband per capita penetration rates for EU countries as at July 2008. The EU Commission have calculated Ireland's broadband penetration at 19.5% on the basis of a population size of 4,314,634 in July 2008.[18] While Ireland ranks below the EU27 average in terms of penetration, Figure 3.3.11 shows that Ireland had the fifth fastest growth rate between July 2007 and July 2008 among the EU27 countries.

Figure 3.3.10 – EU Fixed Broadband Penetration Rate, July 2008

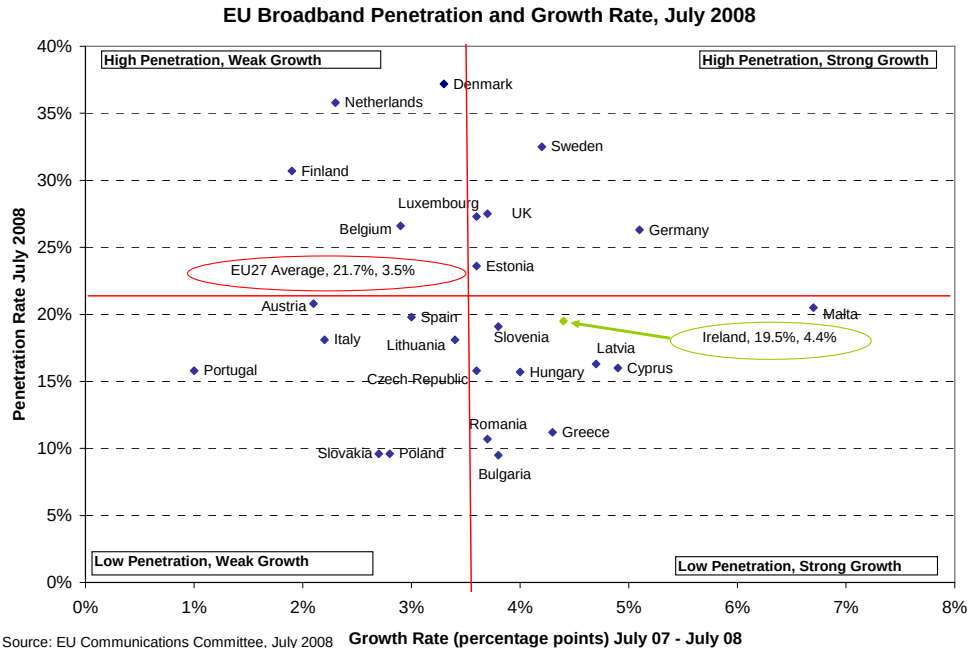


Source: EU Communications Committee, July 2008

17 www.cso.ie

18 The EU Commission define broadband lines as those with capacity equal to or higher than 144 Kbit/s.

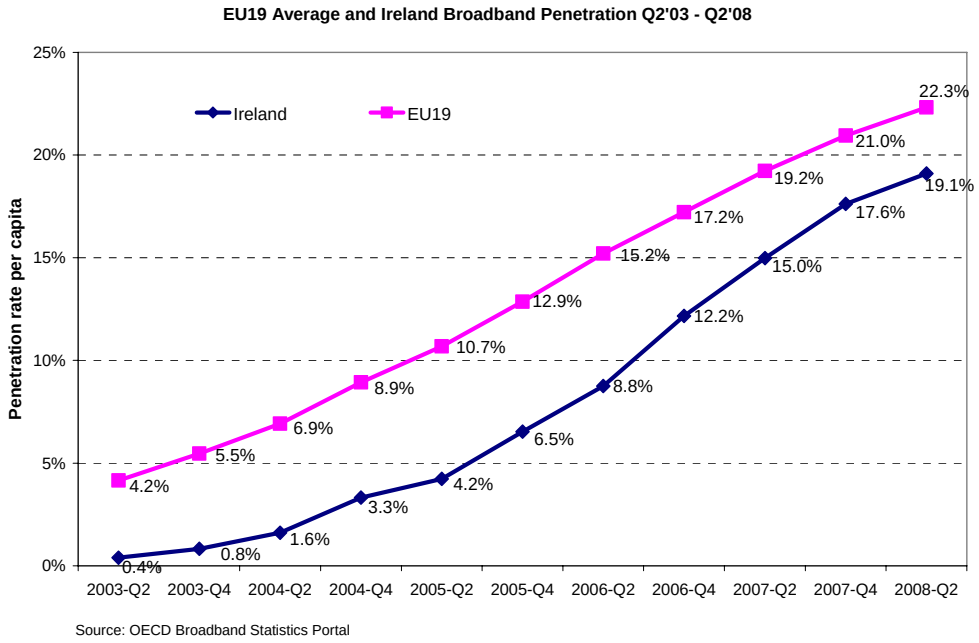
Figure 3.3.11 – EU Broadband Penetration and Growth Rate, July 2008



Source: EU Communications Committee, July 2008

Figure 3.3.12 charts the Irish broadband penetration rate against the average of 19 European countries over the last five years. The gap has averaged approximately 4.9% over this period, narrowing over the last three quarters.

Figure 3.3.12 – European & Irish Average Broadband Penetration, Q2'03-Q2'08



Source: OECD Broadband Statistics Portal

3.4 WiFi Broadband Access

ComReg provides data on the provision of public and private broadband services over WiFi as such access provides an alternative means of internet access for those users without internet access at home and/or a supplementary means of access for users who are away from their home or office. ComReg presents data on the WiFi market based on the number of WiFi hotspots and access points located nationally. Internet hotspots are typically public wireless access points where a computer, usually a laptop, or other portable device can connect to the internet. A WiFi hotspot can be made up of one or more WiFi access points[19].

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

19 Hotspots are typically public locations at which broadband internet access can be obtained. At these hotspots, users with a computer (usually a laptop) can wirelessly connect to the internet either for free or on payment of a fee. Typical locations for such hotspots include cafes and restaurants, hotels and airports. In general terms, more than one access point can be found at a hotspot.

subscription. There are a number of providers of these services in Ireland including Bitbuzz, eircom and BT Ireland.

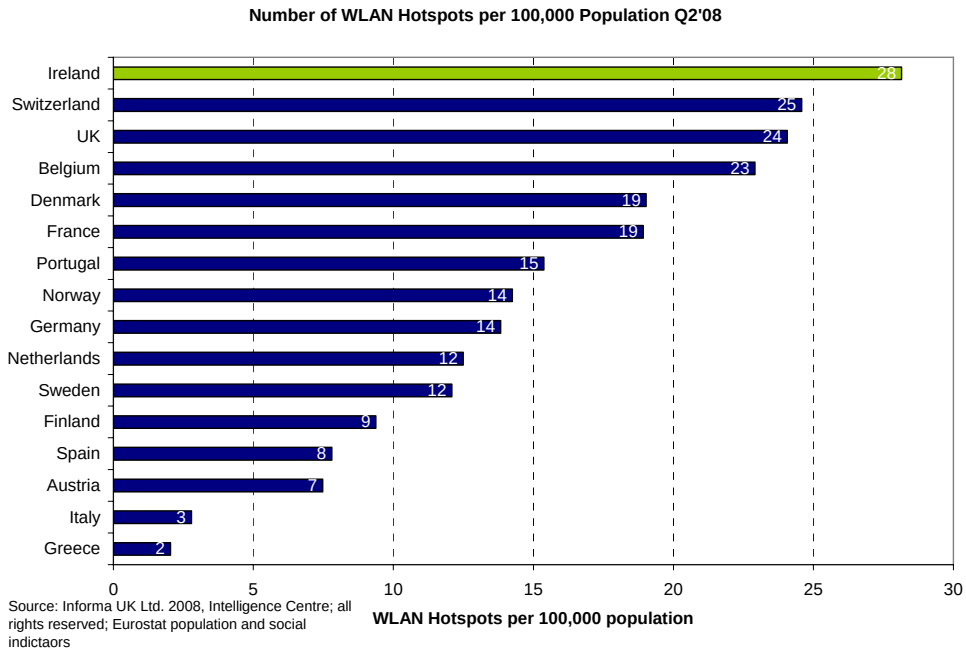
The number of WiFi Access Points has increased by 26.5% between Q3 2007 and Q3 2008. The number of WiFi Hotspots has increased by 10.1% since Q3 2007.

Figure 3.4.1 – WiFi Hotspots and Access Points

	Q3 2008	Q2 08-Q3 08 Growth	Q3 07-Q3 08 Growth
WiFi Hotspots	1,363	+10.8%	+10.1%
WiFi Access Points	3,293	+5.5%	+26.5%

Figure 3.4.2 below shows a comparison of public WLAN hotspots among 16 European countries based on data from Informa. Using Eurostat's estimate of the population base for Ireland in 2008 (4,419,859), in Q2 2008 Ireland had the highest number of public WiFi hotspots per capita among the 16 European countries shown in this chart.

Figure 3.4.2 – European Public WLAN Hotspots Q2 2008



3.5 ADSL Pricing Data[20]

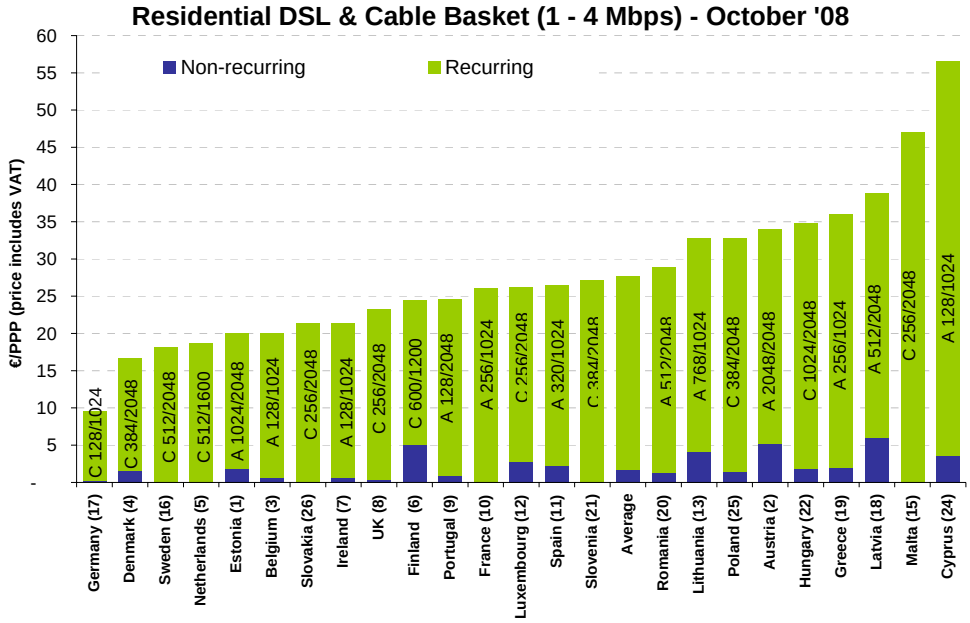
In this report broadband tariff baskets have been supplied by Teligen using their T-Connect product. In order to ensure that services can be adequately compared, the benchmarking model prices a range of DSL and cable services based on defined usage of 30 hours per month, with each session assumed to last for 30 minutes. While broadband is an always-on product, the assumption of an average user profile ensures that packages are comparable across countries. It further assumes a download usage of 5 Gigabytes every month for each service. Upload and download speeds (based on contracted speeds) are also analysed. In this report ComReg has compared residential tariffs only.

The data presented in the following chart illustrates the cheapest product available in each country from the incumbent operator under these usage assumptions for residential DSL and cable offerings. These packages have advertised download speeds of between 1 – 4 Mbps and more specific details on the upload and download speeds for each of the analysed products are included in the Figures. Speeds of 1-4Mbps were chosen for incumbent operators across all benchmarked countries to ensure that a meaningful comparison can be made between packages in terms of contracted speeds offered. Incumbent operators' broadband packages are compared on the assumption that their products should be available nationally. Further information on the composition of the broadband basket can be found in the Explanatory Memorandum which accompanies this report[21].

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

21 ComReg Document 08/101a

Figure 3.5.1 – Lowest Monthly Rental Residential DSL & Cable Basket (1 – 4 Mbps) – October 2008



To note: The numbers in brackets represent each Member State's respective rankings as at March 2008

Source: Teligen *(A)= ADSL and (C)= Cable*

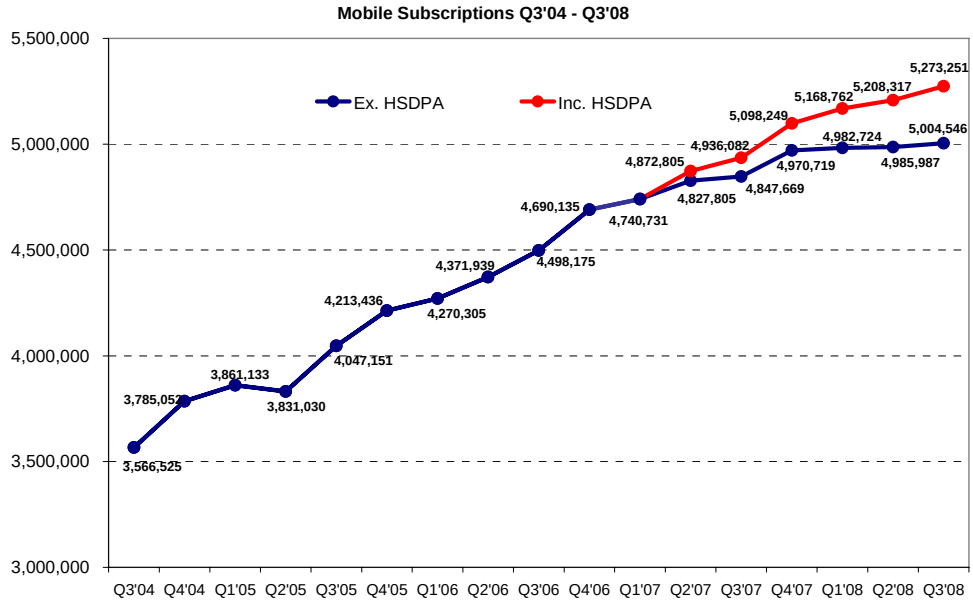
Ireland ranks in 8th place in the DSL & Cable basket and compares favourably with the EU24 average. The Irish broadband product benchmarked is eircom's Broadband Home Starter package.

4 Mobile Market Data

4.1 Number of Subscriptions and Penetration Rate

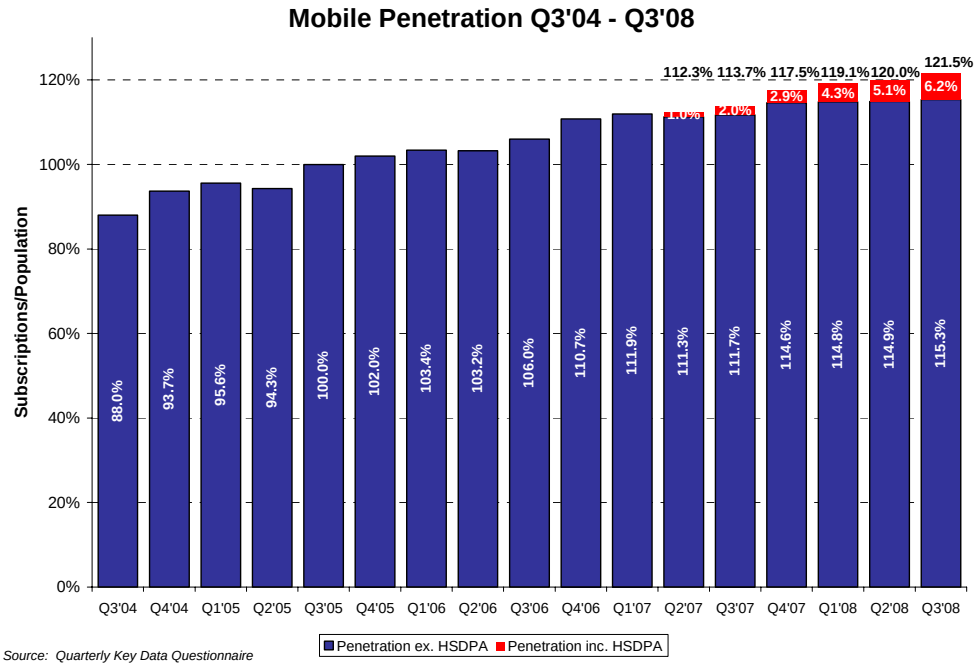
At the end of September 2008 there were 5,273,251 mobile subscribers in Ireland. Included in that total, since Q2 2007, are HSDPA mobile broadband subscriptions. If HSDPA is excluded (268,705) the total number of mobile subscriptions in Ireland was 5,004,546. Excluding mobile broadband, subscriptions have grown by 0.4% this quarter and 3.2% since Q3 2007. Including mobile broadband, subscriptions have increased 1.2% this quarter and 6.8% since Q3 2007. A historical plot is provided below in Figure 4.1.1.

Figure 4.1.1 – Mobile Subscriptions Q3'04 – Q3'08



Source: Quarterly Ket Data Questionnaire

Figure 4.1.2 – Irish Mobile Penetration Rate



Source: Quarterly Key Data Questionnaire

At the end of September 2008, there were over 5.27 million 2G and 3G mobile subscriptions in Ireland[i]. Figure 4.1.2 illustrates the growth in mobile penetration since Q3 2004 and notes that at the end of September 2008, mobile penetration, based on a population of 4,339,000 (using CSO April 2007 estimate), was 121.5%[22]. Total mobile subscriptions, including 2G/3G voice subscriptions and mobile broadband subscriptions, increased by almost 65,000 in Q3 2008. Mobile penetration is recognised as the standard metric internationally to describe the adoption of mobile services, and is calculated based on the number of active SIM cards[23] per 100 of the population.

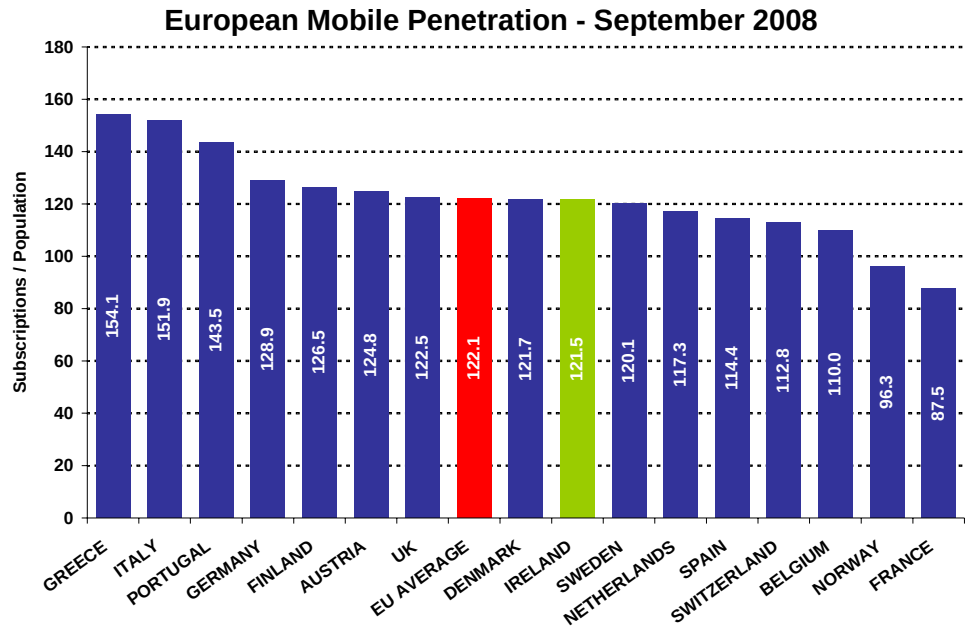
Given that some mobile users may have used more than one active SIM card during the period, there is likely to be some over-estimation of actual mobile usage using this metric. ComReg's calculation of mobile subscriptions now includes active SIMs bundled with HSDPA datacards and USB modems for internet access via laptops/PCs as well as SIM cards used in mobile phones for voice and data services since Q2 2007.

23 Figures since Q2 2007 have been amended in this chart to include HSDPA subscriptions.

23 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.

Figure 4.1.3 illustrates estimated national mobile penetration rates across European countries in June 2008. Ireland (121.5%) is marginally behind the EU average of 122.1%.[24]

Figure 4.1.3 – European Mobile Penetration Rates



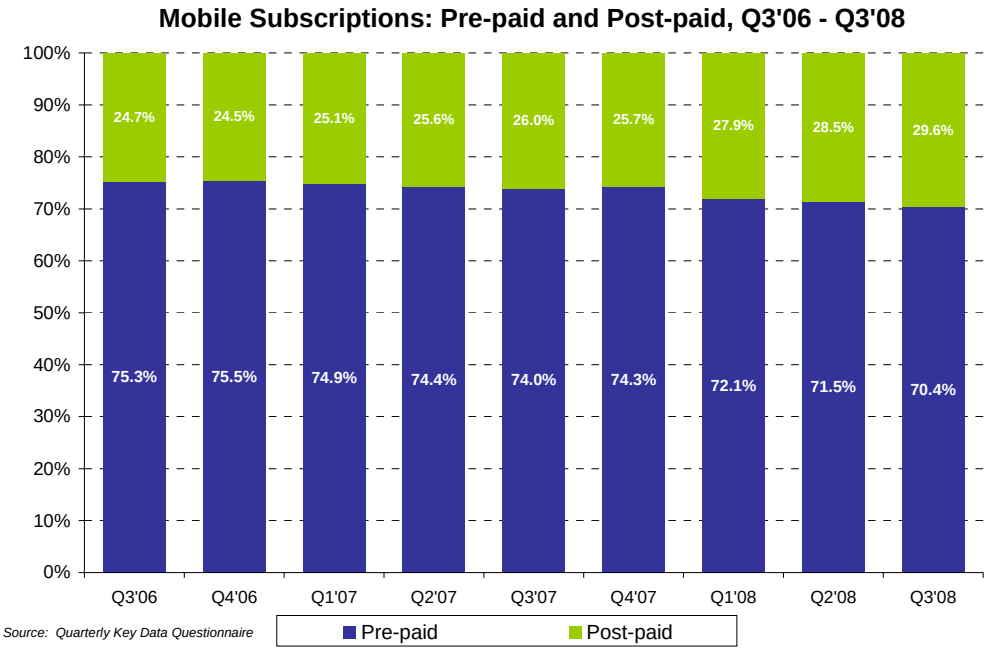
Source: Yankee Group

24 Irish data sourced from ComReg includes mobile broadband subscriptions. Not all countries in this chart may include mobile broadband subscriptions.

4.2 The Profile of Mobile Subscriptions in Ireland

Mobile users in Ireland pay for their mobile service by either purchasing pre-paid credit, or by receiving a monthly bill from their mobile operator, described in this report as a post-paid payment option. Figure 4.2.1 illustrates the mobile subscription base in Ireland classified by the proportion of pre-paid and post-paid subscriptions on both 2G and 3G networks at the end of September 2008[25]. The pre-paid/post-paid subscription split has seen little change since 2006. The proportion of post-paid subscriptions increased in Q1 2008 due to the inclusion of mobile broadband datacards and USB modems and increased by 0.6% and 1% quarter on quarter since then.

Figure 4.2.1 – Proportion of Pre-Paid and Post-Paid Subscriptions

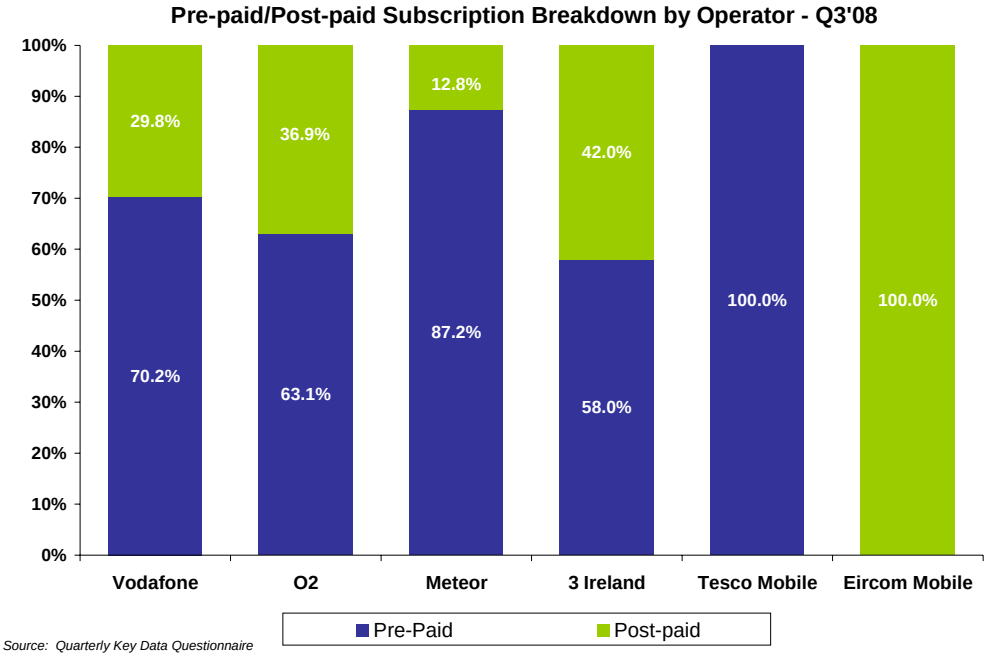


Source: Quarterly Key Data Questionnaire

25 Mobile broadband subscriptions (HSDPA) are included only from Q1 2008 in this chart.

Figure 4.2.2 shows the pre-paid and post-paid subscription profile for each of the mobile operators in the Irish market (mobile broadband subscriptions are included). Eircom Mobile, which is a business only service, has the highest proportion of post-paid customers with all of its subscriptions in the post-paid category. Tesco reports the largest proportion of pre-paid subscriptions, with its entire subscriptions base using the pre-paid payment option. The majority of Vodafone's subscription base are pre-paid subscriptions at 70.2% in Q3 2008. The majority of O2 and Meteor's subscription bases are also pre-paid, at 63.1% and 87.2% respectively. 3 Ireland's subscription base is more evenly split between post-paid and prepaid subscriptions. Among Vodafone, O2, Meteor and 3 Ireland there has been a small shift in numbers towards post-paid subscriptions in Q3 2008 driven by mobile broadband adoption.

Figure 4.2.2 – Profile of Pre-Paid and Post-Paid Subscriptions – by Operator



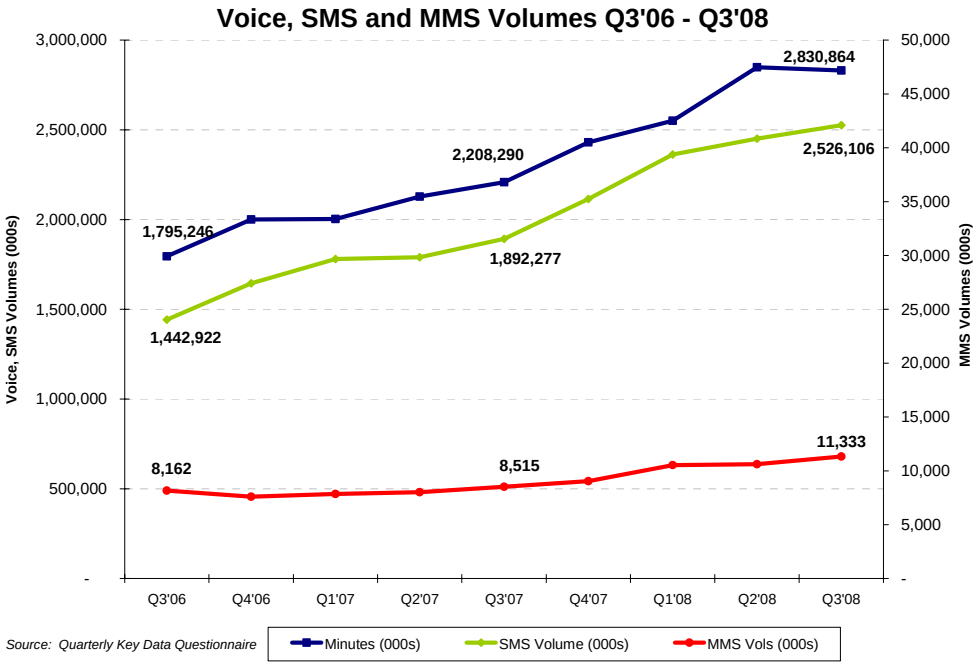
Source: Quarterly Key Data Questionnaire

4.3 Mobile Volumes

4.3.1 Total Voice, SMS and MMS Mobile Traffic[26]

Figure 4.3.1.1 illustrates the growth in voice minutes, SMS, and MMS (Multimedia Messaging Service) messages sent over mobile networks since Q3 2006. Total retail mobile voice traffic totalled over 2.8 billion minutes in Q3 2008. This represents a decrease of -0.6% in voice volumes since the previous quarter. However, this represents a 28.2% increase in voice volumes since the same period in 2007 and a 57.7% increase since Q3 2006. Mobile originating minutes now account for 55.9% of all voice traffic in the Irish telecommunications markets. The total number of SMS messages sent by mobile users in Ireland totalled 2.52 billion in Q3 2008. SMS messaging grew by 3.1% quarter on quarter, and volumes of SMS have increased by 33.5% since Q3 2007 and by 75.1% since Q3 2006. If the total volume of text messages is averaged over all active subscriptions, an average of 160 SMS messages were sent per subscription, per month in Q3 2008, compared with 128 in the same period last year.

Figure 4.3.1.1 – SMS, MMS and Call Minute Volumes



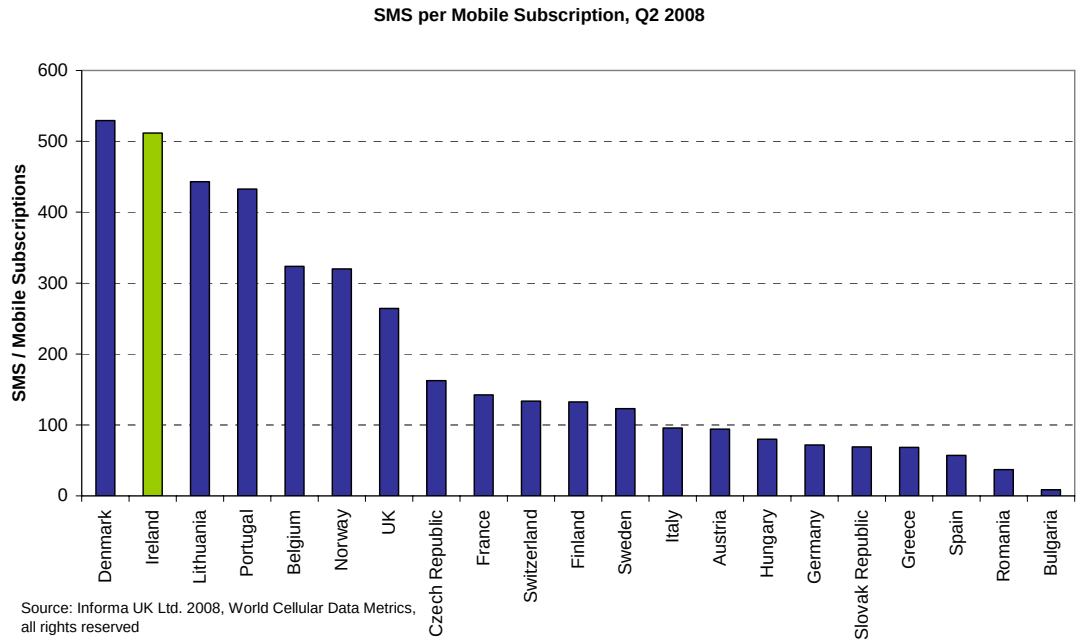
Source: Quarterly Key Data Questionnaire

The number of MMS messages, or multimedia messages such as picture messages, sent in the quarter, though relatively low when compared to voice minutes and SMS volumes, continues to increase. There were just over 11.3 million MMS messages sent during the quarter. This is an increase of 6.8% on the previous quarter.

26 Currently some minutes from data services are included in retail voice minutes. Given the increased usage of data services ComReg will endeavour to separate these minutes from the voice category in 2009. SMS volumes include those sent over mobile broadband datacards and usb modems.

Figure 4.3.1.2 shows the number of SMS messages per subscription sent in European countries in Q2 2008. In most cases the data does not reflect the total number of SMS per mobile subscription per country but represents at least a minimum of two major operators in each country. On this basis, among the benchmarked countries, Ireland had the second highest number of SMS messages sent per subscription in Q2 2008.

Figure 4.3.1.2 - SMS per Mobile Subscription[27]



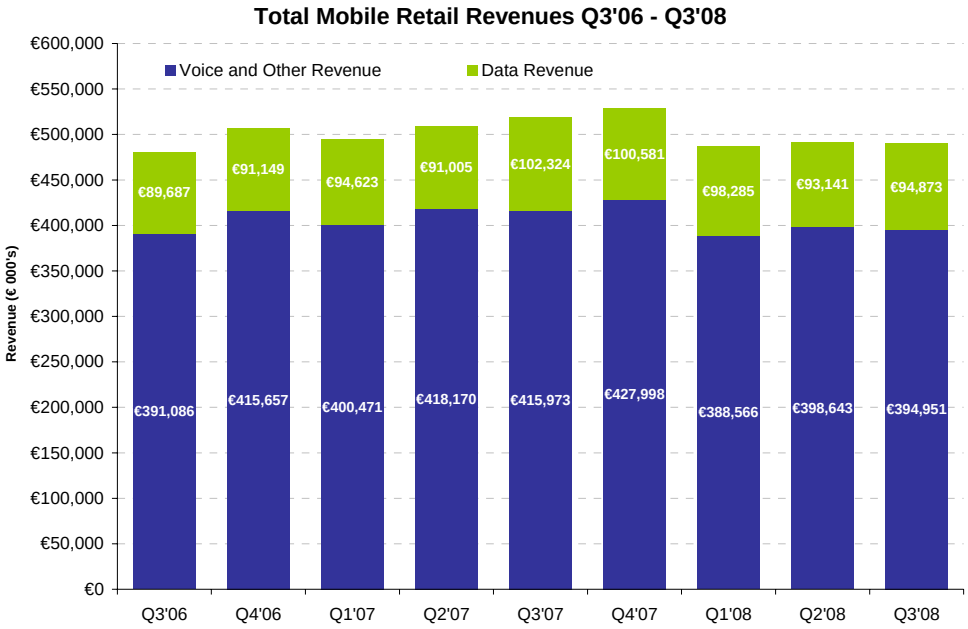
Source: Informa UK Ltd. 2008, World Cellular Data Metrics, all rights reserved

27 Please note that this data does not reflect total SMS for each country but is representative of a number of major operators in each country. SMS traffic is deemed to include person-to-person messaging, as well as premium and value added services. Operator definitions vary however on what constitutes messaging traffic in their reported figures and likely includes free and bundled SMS. Data is a mixture of actual and estimated values. Source: © Informa UK Ltd 2008. All rights reserved. World Cellular Data Metrics.

4.4 Mobile Revenues

Figure 4.4.1 shows that mobile retail revenues for the quarter were almost €490 million. Although data revenues were up marginally in this quarter, the voice and other revenues category was down on the previous quarter leading to a decrease of almost €2 million in total retail revenues for Q3 2008. This may be reflective of the downturn in the global economy impacting upon the mobile industry and effect of price caps on EU roaming charges. A recent report by Ovum suggests that while Western European mobile markets remain strong, growth will be slower than previously anticipated. They highlight that more mobile network operators (MNOs) are witnessing a fall in their year on year quarterly revenues. Of 17 MNOs examined by Ovum, nine experienced a year on year quarterly revenue decline in Q3 2008.[28]

Figure 4.4.1 – Total Mobile Retail Revenues Q3'06- Q3'08

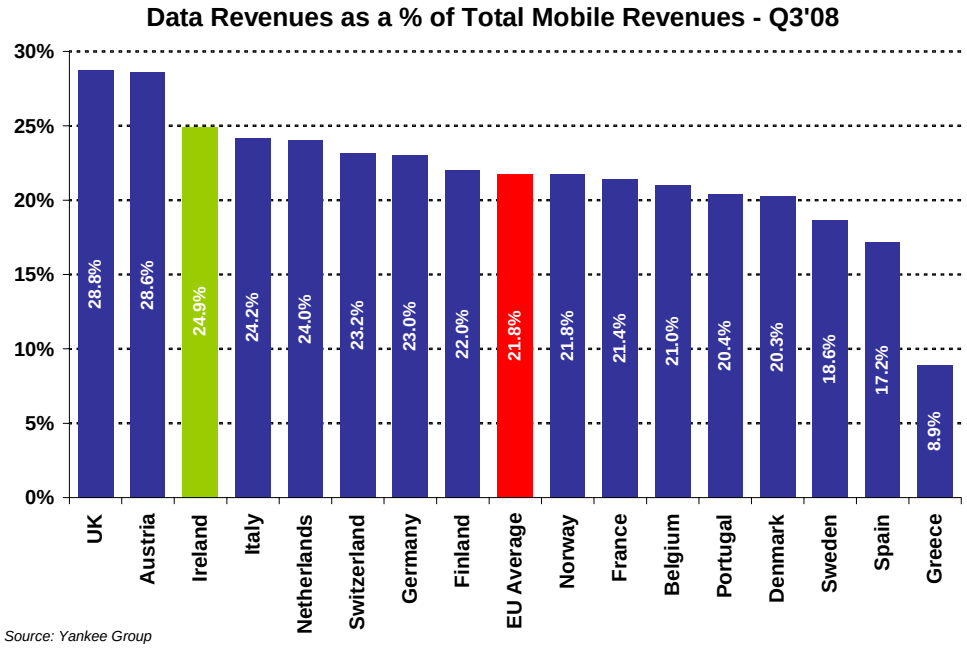


Source: Quarterly Key Data Questionnaire

28 Ovum, *Credit Crunch jitters dawn on global mobile market*, December 2008.

Figure 4.4.2 outlines the percentage of mobile revenues attributable to all data revenues in the Irish market compared to a number of other EU-15 markets. This benchmarking data is calculated independently by the Yankee Group, and includes data revenues not only from SMS and MMS messaging, but also data revenues from GPRS data services and 3G data services. Irish mobile operators rank third in comparison to other European operators in terms of levels of data revenues as a percentage of overall revenues. In Q3 2008, for Ireland, 24.9% of total mobile revenues were contributed by data revenues. This represents an increase of approximately 13.1% since Q3 2007.

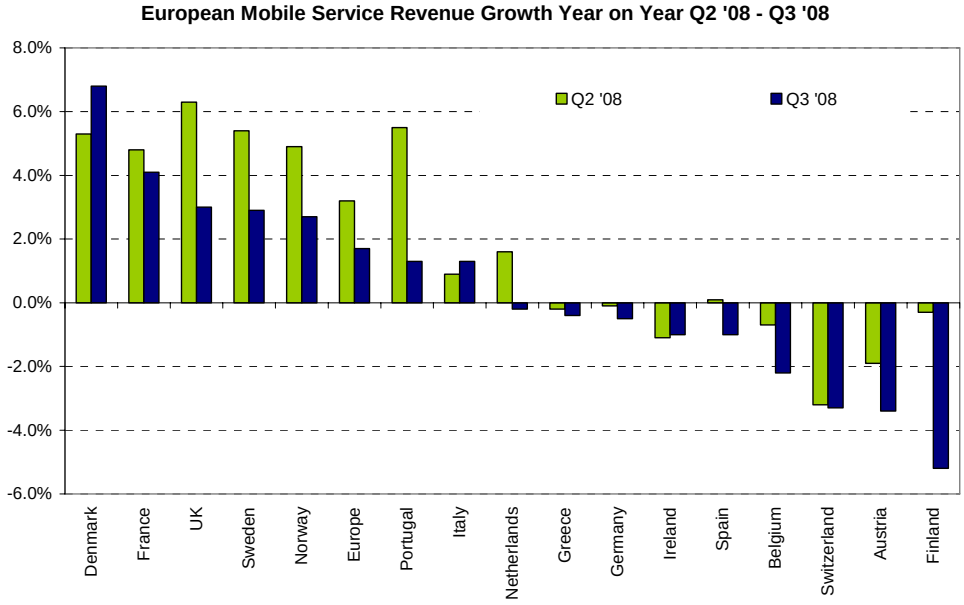
Figure 4.4.2 - Data Revenues as % of Total Mobile Revenue



Source: Yankee Group

Figure 4.4.3 shows the change in European mobile revenues year on year to Q2'08 and Q3'08. Credit Suisse First Boston indicate that the deterioration in the global economy seems to be impacting on mobile usage and spend. European mobile growth slowed significantly in Q3 2008 to 1.7% growth year on year from year on year growth of 3.2% in Q2 2008. Most markets slowed in Q3 2008 except Denmark, Italy and Ireland. Portugal and the UK slowed significantly, as did the Nordic markets, partly due to mobile termination rate cuts in Sweden and Norway.

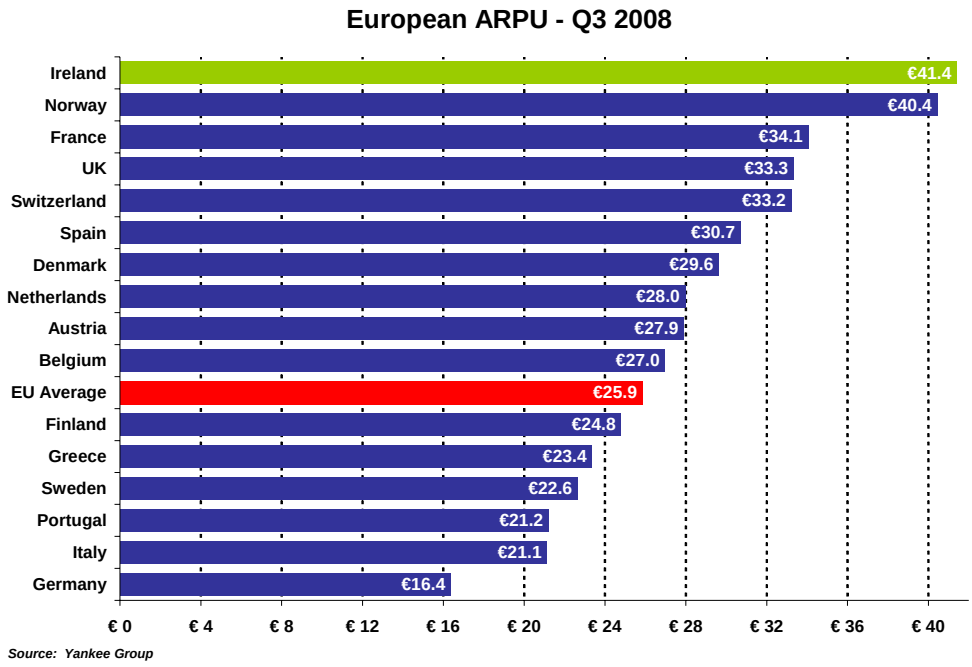
Figure 4.4.3 - European Mobile Service Revenue Growth Q2'08 – Q3'08



Source: Company Data, Credit Suisse, Equity Research, Wireless Telecommunications Services, November 2008

Figure 4.4.4 compares ARPU (average revenue per user) across 16 European countries[29]. Average revenue per user is an indication of average monthly revenue generated by mobile subscriptions in each country. Mobile ARPU in Ireland is estimated at €41.4 per month in Q3 2008, a 7.3% decrease in ARPU since the same period in 2007. The EU average ARPU has also fallen over this period.

Figure 4.4.4 – European Comparison of ARPU – Q3 2008



Source: Yankee Group

29 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.

4.5 Average Minutes of Use

Mobile monthly ARPU is a function of both the price of mobile services and the level of usage of mobile services. The most frequently used metric to determine levels of mobile telephony usage is monthly minutes of use. ComReg has collected monthly minutes of use data from all operators in the Irish market since Q1 2007. Further information on the definition and calculation of average minutes of use by ComReg is detailed in the explanatory memorandum which accompanies this report[30]. Average minutes of use in Ireland for Q3 2008 were 238 minutes per month, a 1.3% decrease on usage since the previous quarter.

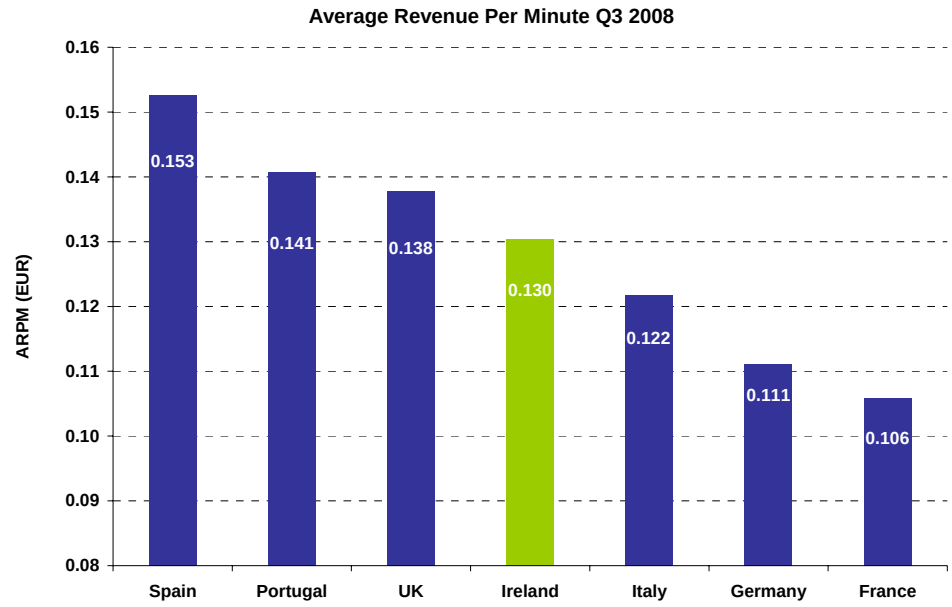
Figure 4.5.1 – Minutes of use Q2'08 – Q3'08

Country	MoU Q2'08	MoU Q3'08	Quarterly Change Q2'08 – Q3'08
France	255	253	-0.7%
Ireland	241	238	-1.3%
UK	177	172	-2.4%
Spain	166	167	+0.5%
Italy	130	132	+1.1%
Portugal	121	120	-0.7%
Germany	114	113	-0.4%

30 ComReg Document 08/101a

The Yankee Group has provided ComReg with data which provides estimates of monthly minutes of use for mobile markets in 7 European countries. Figure 4.5.2 plots Average Revenue Per Minute (ARPM) for these countries[31]. ARPM is not the rate per minute that would be paid by a subscriber in any of these countries. It is an indicative per-minute rate based on a limited data set, not split by pre- and post-paid revenues[32]. ARPM shows that revenues per minute of use by an Irish customer has increased by 0.7% in Q3 2008.

Figure 4.5.2 – Average revenue per minute (ARPM), Q3 2008



Source: Yankee Group

31 The necessary data for calculating ARPM was only available for Ireland, France, Spain, UK, Germany, Italy, and Portugal.

32 Average Revenue Per Minute is calculated by dividing monthly voice-only ARPU by MOU. Revenues used in the calculation include those related to roaming and wholesale termination.

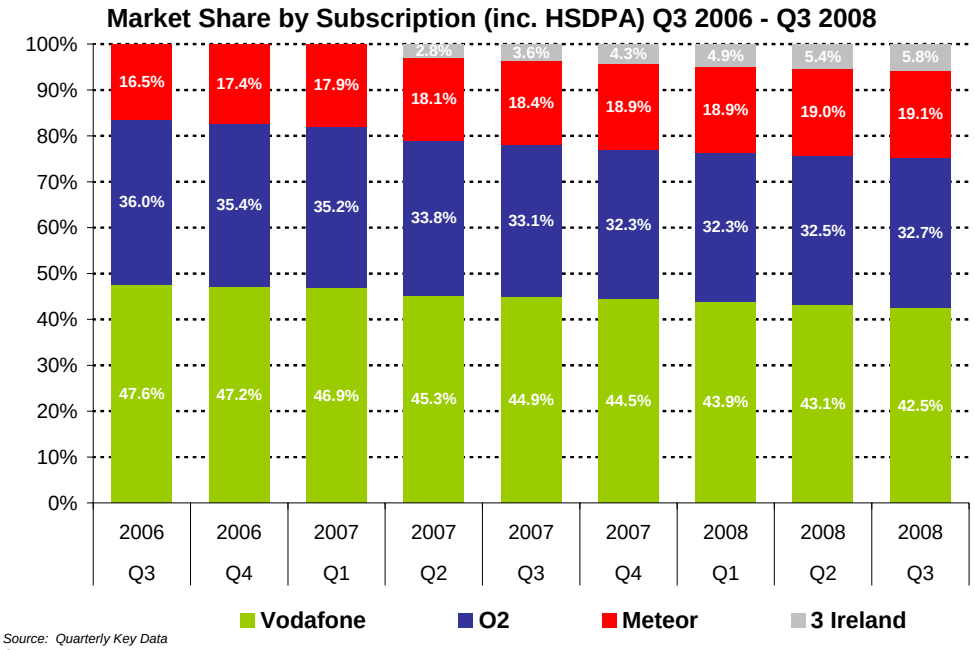
4.6 Competition in the Mobile Market

4.6.1 Mobile Market Shares- By Subscription and Retail Revenues

Figures 4.6.1.1 and 4.6.1.2 outline mobile market share based on the number of active subscriptions reported by each operator. The former includes mobile broadband since Q3 2007 while the latter excludes mobile broadband. It should be noted that while 3 Ireland's market share is presented as a percentage of all market subscriptions in Ireland, 3 Ireland operates only in the 3G sector. Tesco and eircom Mobile are not included in Figures 4.6.1.1 and 4.6.1.2.

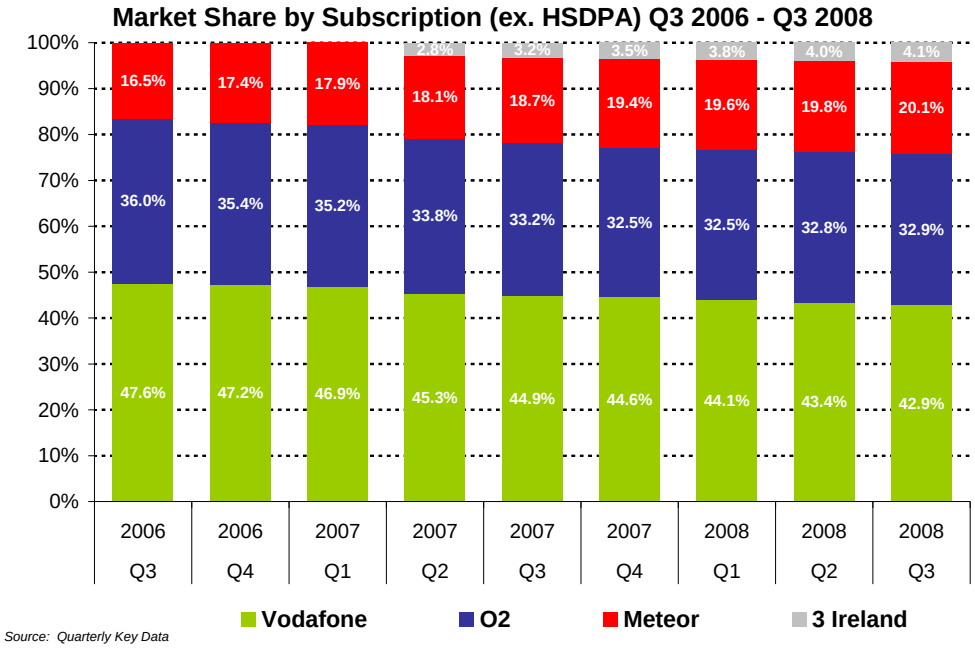
Vodafone's market share has declined quarter on quarter over the last two years including and excluding mobile broadband. O2's market share has also declined since Q3 2006 though its market share did pick up slightly in Q2 and Q3 2008. 3 Ireland currently accounts for 5.8% of the total active mobile subscription base in Ireland (including mobile broadband) and 4.1% excluding mobile broadband. Excluding O2 and Vodafone, all other operators (excluding eircom mobile and Tesco) now account for between 24% and 25% of the market, including and excluding mobile broadband.

Figure 4.6.1.1 – Market Share – Number of Subscriptions (inc. HSDPA)



Source: Quarterly Key Data

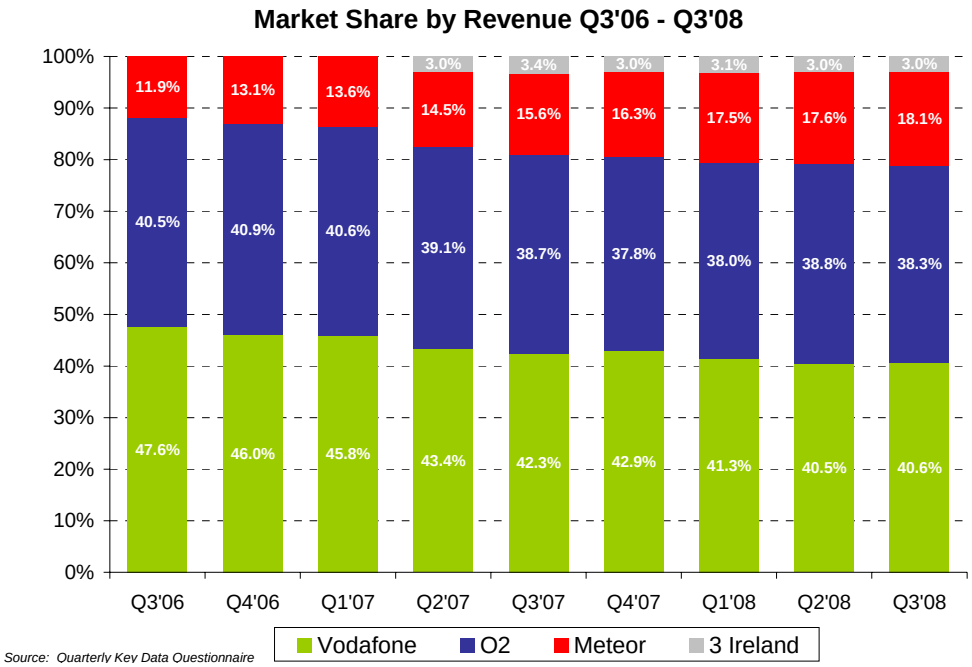
Figure 4.6.1.2 – Market Share – Number of Subscriptions (ex. HSDPA)



Source: Quarterly Key Data

Figure 4.6.1.3 provides an analysis of market shares by revenue for mobile operators in the Irish market. Tesco and eircom mobile are not included in Figure 4.6.1.3. 3 Ireland accounted for 3% of mobile industry retail revenues in Q3 2008. Meteor's market share has continued to rise steadily and is now 18.1%. O2's market share decreased slightly in this quarter, while Vodafone's market share increased marginally in Q3 2008.

Figure 4.6.1.3 – Market Share – Revenue



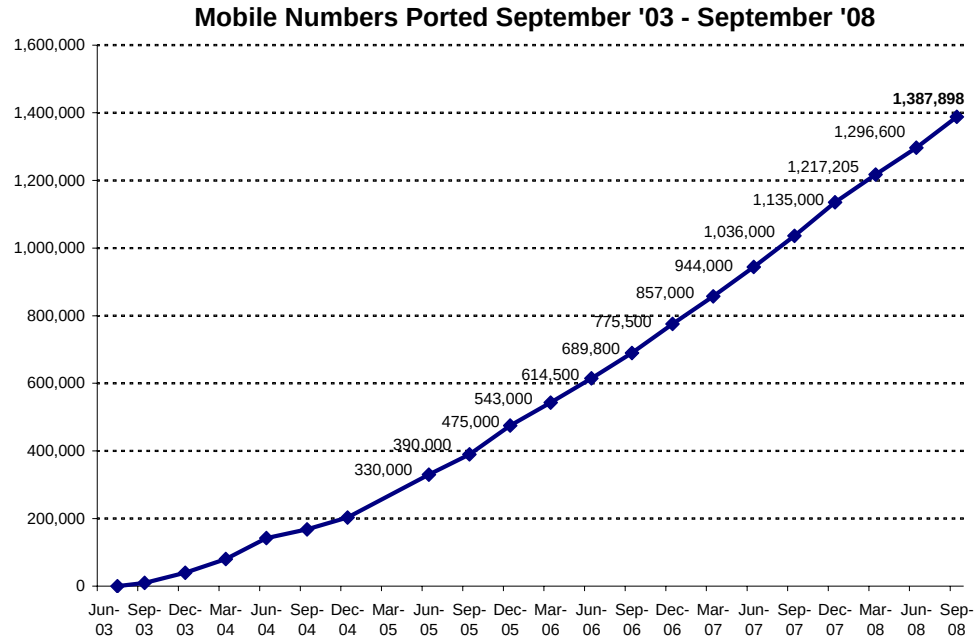
Source: Quarterly Key Data Questionnaire

4.6.2 Switching in the Mobile Market

Figure 4.6.2.1 illustrates the cumulative total of mobile numbers ported between Irish mobile operators since the launch of Mobile Number Portability (MNP) in June 2003. MNP allows mobile subscriptions to switch mobile operator while retaining their mobile number.

A total of 1,387,898 people have used MNP to switch operator since June 2003. In the quarter to September 2008 91,298 numbers were ported to another operator. Based on data since September 2007, an average of 88,858 numbers were ported each quarter.

Figure 4.6.2.1 – Cumulative Mobile Numbers Ported



Source: Quarterly Key Data Questionnaire

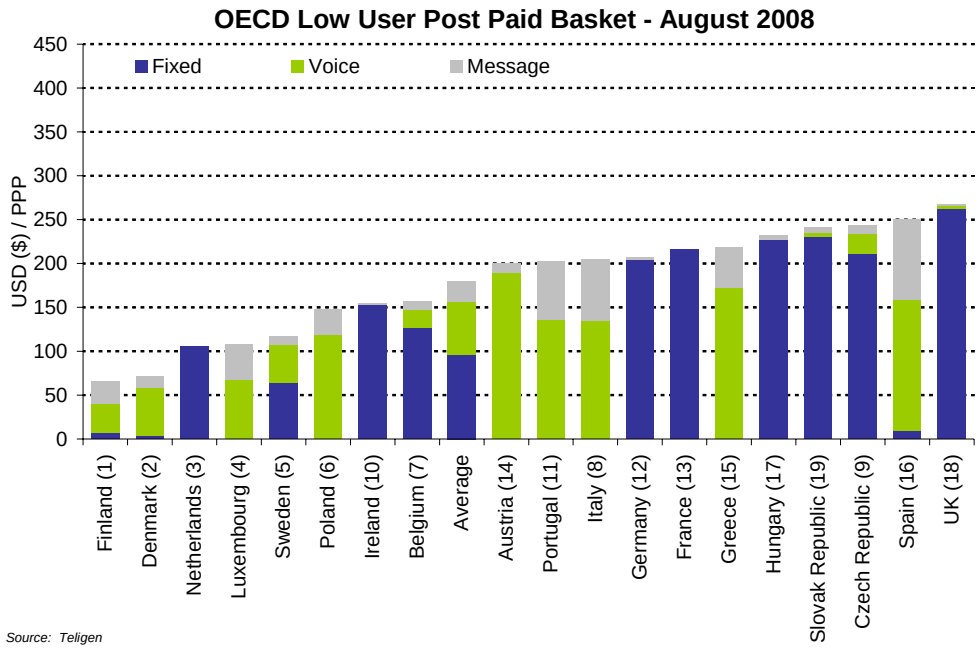
4.7 Mobile Pricing Data[33]

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 subscription 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.

4.7.1 Low User Post Paid Mobile Basket[34]

Ireland ranks 7th out of the 19 EU countries benchmarked. Ireland has improved by three places since Q2 2008.

Figure 4.7.1.1 - OECD Low User Post Paid Mobile Basket – August 2008



Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at May 2008

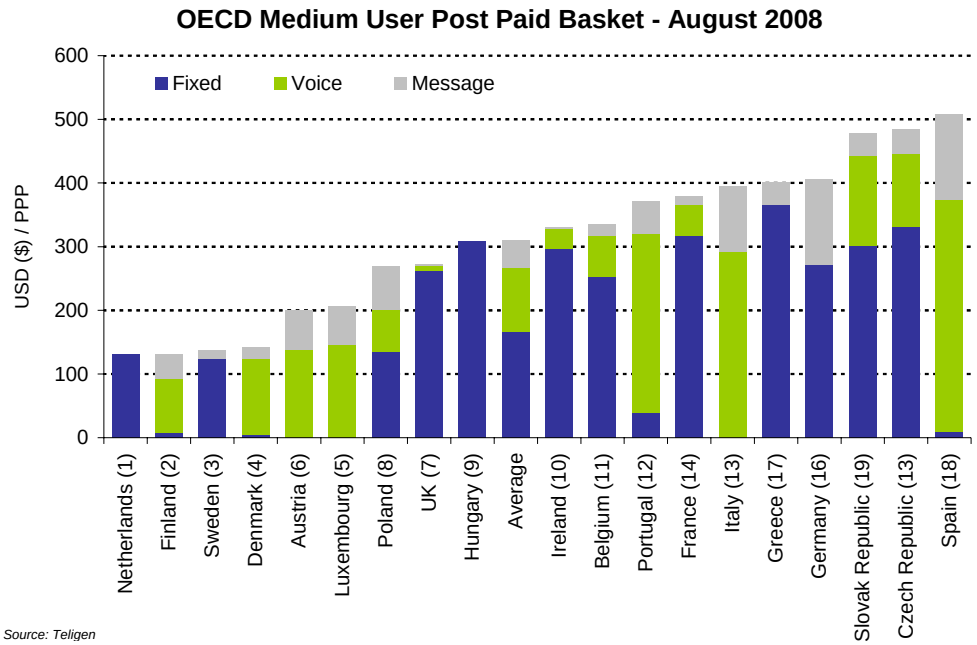
33 The 'Fixed' component of price refers to the standard charges imposed by operators, regardless of the amount of calls made (i.e. connection and rental). Teligen's calculation of this Figure is made up of: Installation Charge/5 + Rental charge for 1 year. The 'Voice' component of price refers to the 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.

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

4.7.2 Medium User Post Paid Mobile Basket

Ireland ranks in 10th place on this measure, remaining in the same position since Q2 2008. For this usage basket, the Netherlands continues to have the lowest cost among the countries benchmarked.

Figure 4.7.2.1 - OECD Medium User Post Paid Mobile Basket – August 2008

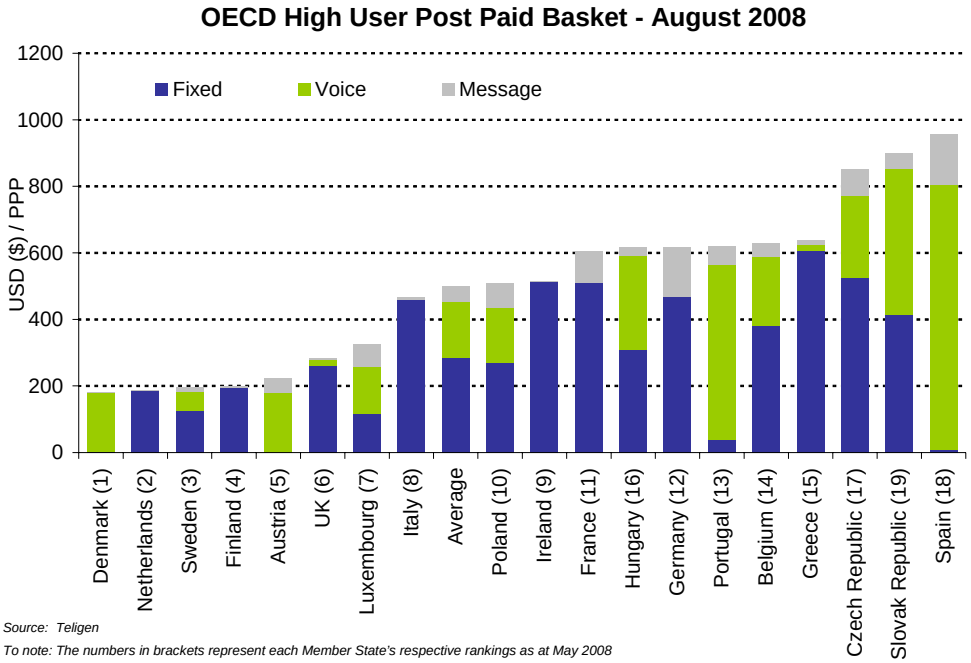


Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at May 2008

4.7.3 High User Post Paid Mobile Basket

In the High-User Post-Paid basket, Ireland ranks in 10th place among the 19 EU countries, two places behind the average.

Figure 4.7.3.1 - OECD High User Post Paid Mobile Basket – August 2008

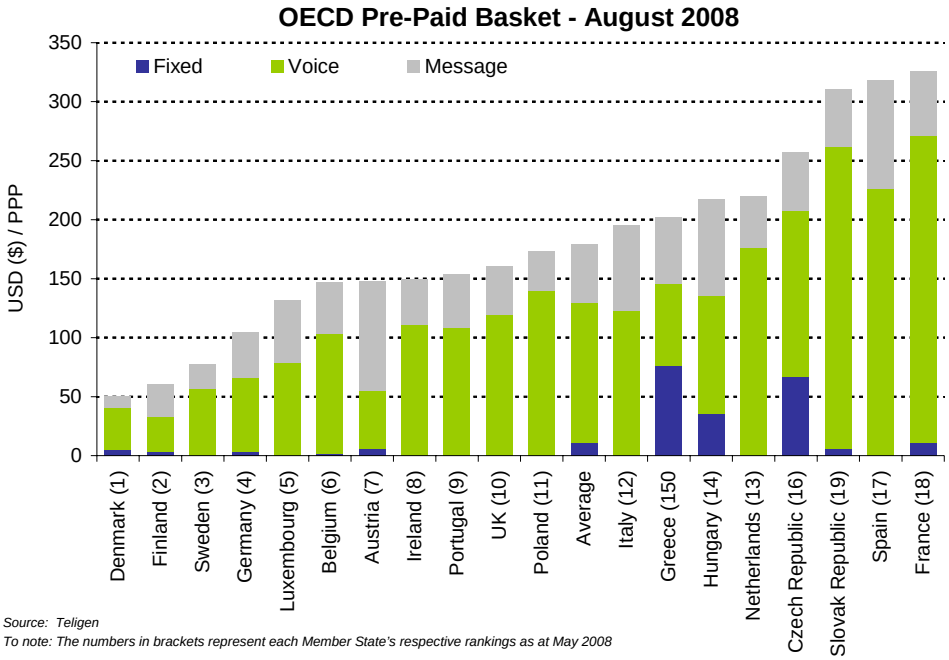


Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at May 2008

4.7.4 Pre-Paid Mobile Basket[35]

As in May 2008, Ireland's ranking has not changed this quarter, ranking 8th among the 19 EU countries and above the average.

Figure 4.7.4.1 - OECD Pre-Paid Mobile Basket – August 2008



Source: Teligen
To note: The numbers in brackets represent each Member State's respective rankings as at May 2008

35 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.

5 Broadcasting

5.1 Overall Broadcasting Market

The broadcasting analysis provided in this report uses operator data in conjunction with CSO estimates[36] of the total number of TV households in Ireland. This is particularly relevant in deriving the number of households that use only a Free-to-Air[37] television service. There are approximately 1.46 million TV households in Ireland, based on the CSO's 2007 Information Society report.

Of the total number of TV households at the end of September 2008 there were 530,461 subscriptions to cable[38] /MMDS[39] television services in Ireland. For the same period, ComReg estimates that BSkyB has 562,000 Irish satellite[40] TV subscriptions, a growth of 5,000 subscriptions in the last three months and 49,000 since the same reporting period last year. The total number of pay TV households in Ireland (cable, MMDS and satellite) is 1.091 million.[41] Pay-TV households now represent 74.9% of all homes with a television.

Figure 5.1.1 – Broadcasting Subscriptions and Growth Rates by Platform

Platform	No of Subscriptions Q3 '08	Quarterly Change Q2 '08 – Q3'08	Annual Change Q3'07 – Q3'08
Analogue Cable	221,356	-4.94%	-14.81%
Digital Cable	216,227	+0.04%	+0.24%
MMDS	92,878	-3.57%	+0.86%
Satellite	562,000	+0.90%	+9.55%
Total-Pay-TV H'holds	1,091,811	-0.95%	+1.03%
Free-to-View	366,489	+2.95%	-2.96%
Total TV H'holds	1,458,300		

36 ComReg uses the most up to date Figure for TV households as per CSO Figures when calculating penetration of Pay TV services. The latest CSO data published in the 2007 Information Society and Telecommunications report, reported 1.4583 million TV households in Ireland. This Figure will remain fixed in future quarterly reports as the CSO will not be revising this Figure in the near future.

37 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.

38 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.

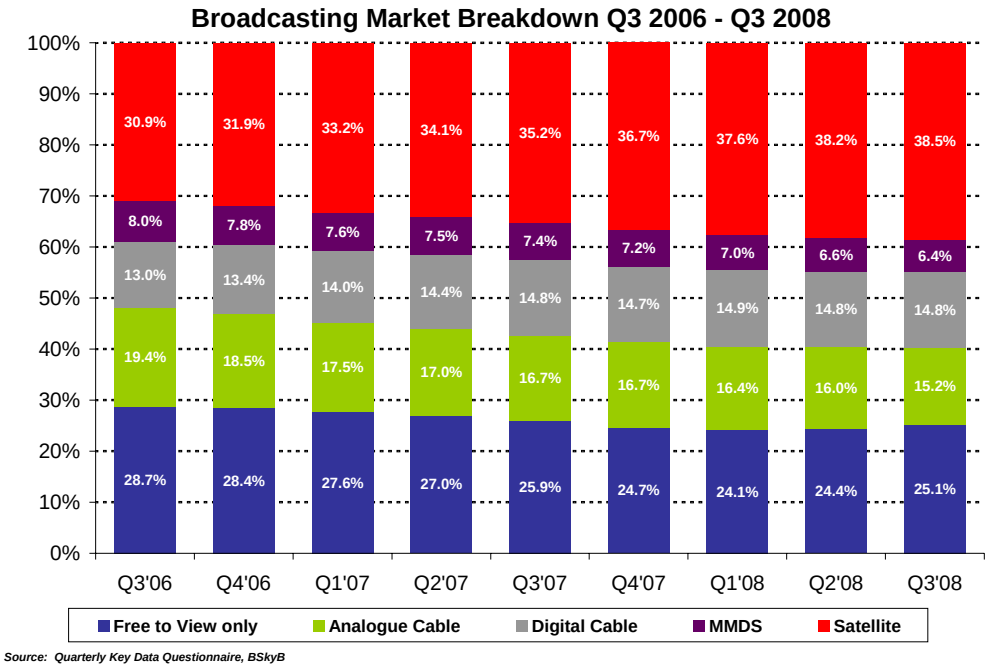
39 MMDS (Multichannel Multipoint Distribution Service) is a wireless telecommunications technology, used as an alternative method of cable television programming reception. MMDS is usually used in sparsely populated rural areas, where laying cables is not economically viable.

40 Satellite television is television delivered by way of communications satellites, as compared to conventional terrestrial television and cable television. As of Q3 2008, BSkyB Irish Subscription data is based on ComReg estimation of BSkyB group data.

41 TV can also be delivered through other mechanisms such as over the internet (IPTV). While this data is not presented in this quarter, ComReg hopes to include such information in the future.

Figure 5.1.2 profiles TV households in Ireland based on those households who subscribe to an analogue or digital cable television service, MMDS, a digital satellite service, or a free-to-air television service.

Figure 5.1.2 - Broadcasting Market Breakdown

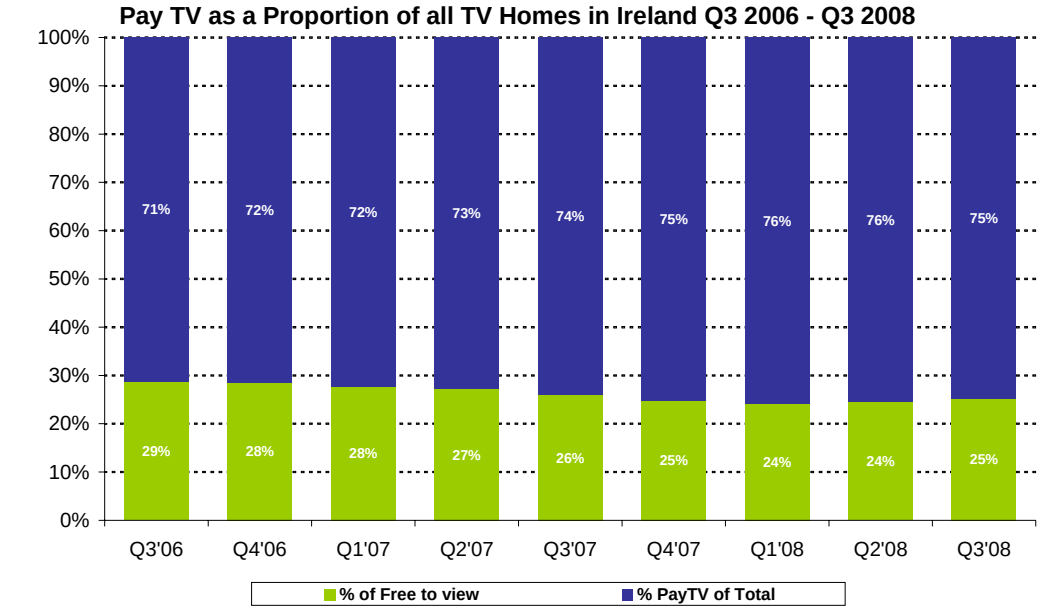


Source: Quarterly Key Data Questionnaire, BSkyB

5.2 Pay TV

Figure 5.2.1 profiles the pay-TV market in Ireland, comparing those who subscribe to an analogue service provided by cable operators, and those who pay for digital TV, provided via either a digital cable service (inc. MMDS) or satellite service with the number of free to view televisions in Ireland. In Q3 2008 79.7% of all those subscribing to a paid television service in Ireland had a digital subscription. Although total pay-TV subscriptions declined in Q3 2008 by 0.95%, since Q3 2007 pay-TV subscriptions in Ireland have grown by 1.03%.

Figure 5.2.1 - Pay TV Market (Analogue and Digital)



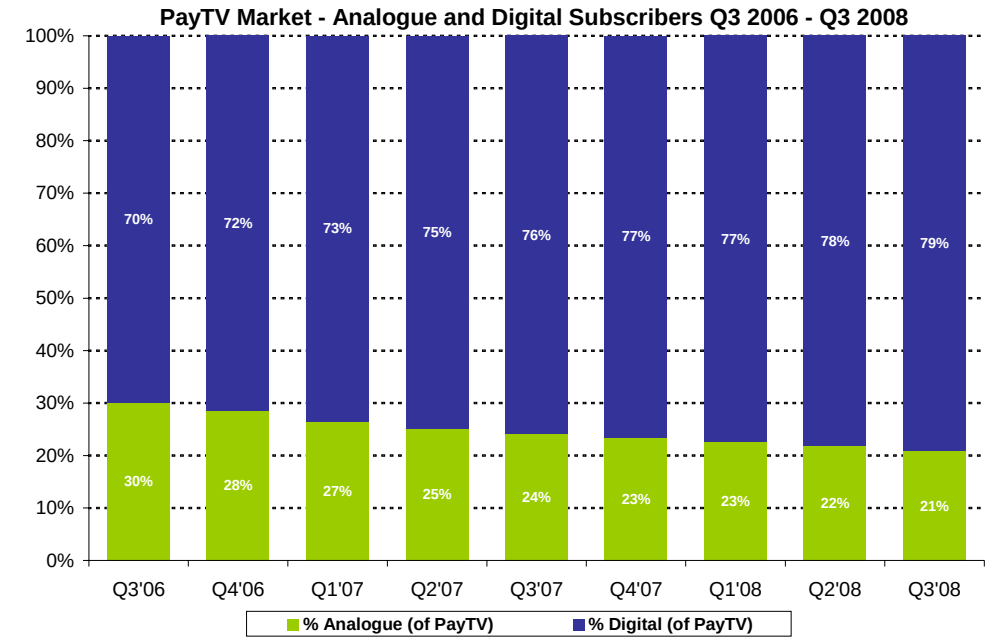
Source: Quarterly Key Data Questionnaire, BSkyB

5.3 Digital TV

At the end of September 2008, there were 870,455 digital TV subscriptions which include cable/MMDS and satellite customers. This was a slight increase (less than 1%) since Q2 2008. Almost 60% of all TV households in Ireland now receive their TV service via a digital television signal, based on either digital cable (inc. MMDS) or satellite.

Figure 5.3.1 profiles the digital TV market, examining the proportion of digital subscriptions who receive their TV signal via a satellite subscription compared with those using digital cable (inc. MMDS). This split of the consumer base has remained relatively unchanged over the last two years.

Figure 5.3.1 - Digital TV (Cable and Satellite Breakdown)



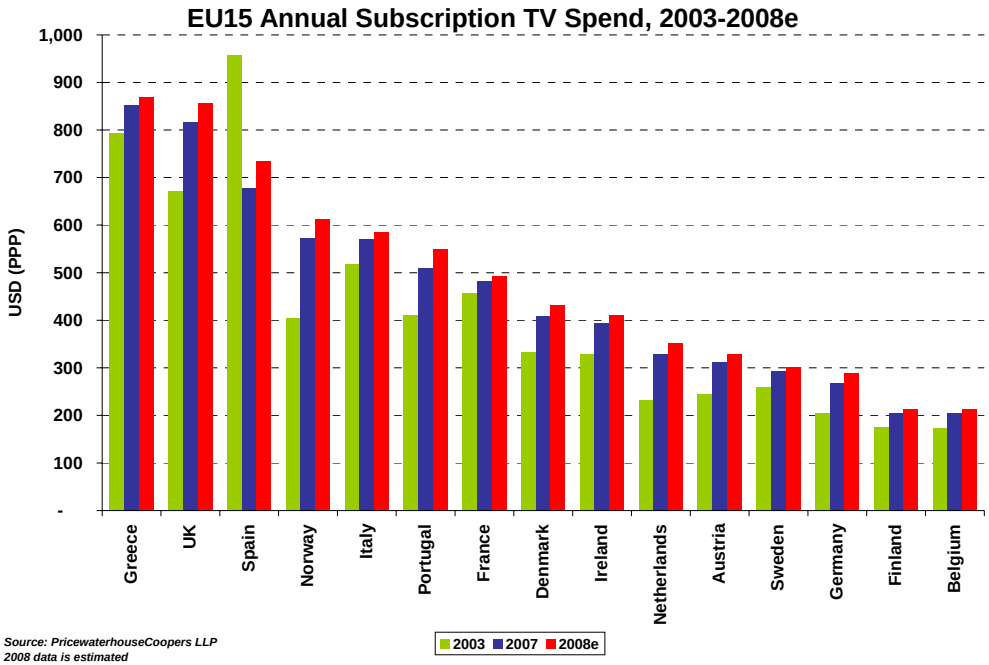
Source: Quarterly Key Data Questionnaire, BSkyB

5.4 International Television Expenditures

Figure 5.4.1 is a new chart provided by ComReg using a cross-country time series of annual expenditure in the EU15 on television subscriptions[42]. The data suggests a definite trend in increased annual television subscription expenditure since 2003. The chart highlights a positive outcome for Irish consumers as annually they are paying below the EU15 mean, which is approximately USD (PPP) 438.

42 The data is sourced from Pricewaterhouse Coopers' Global Entertainment and Media Outlook: 2008-2012 (9th annual edition).

Figure 5.4.1 – EU15 Television Expenditures



Source: PricewaterhouseCoopers LLP
2008 data is estimated

6 Emerging Trends

6.1 Home Networking

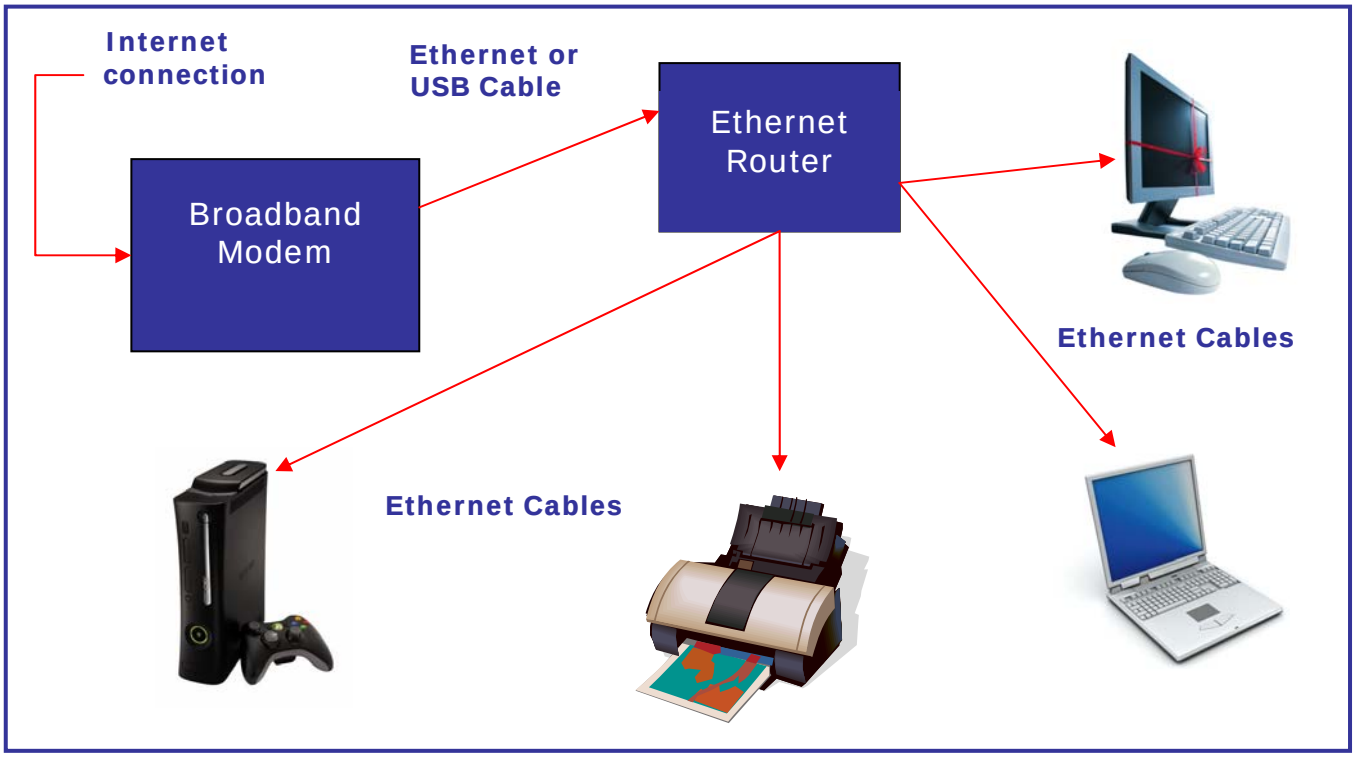
The Emerging Trends series in the Quarterly Report aims to provide information on innovations and emerging technologies within the electronic communication sector. This quarter's Emerging Trends looks at Home Networking. A **home network** is a residential local area network, and is used to connect multiple devices within the home.

6.2 Home Networks – An Overview

A home network is two or more computers interconnected to form a local area network (LAN) within the home. It allows computer owners to interconnect multiple computers or devices so that each can share files, programs, printers, other secondary devices, and Internet access with other computers, reducing the need for superfluous equipment or wires and, on the whole, making everything more accessible and easier to use. Telephone companies can take advantage of the growing popularity of home networking to provide triple play services. IPTV is used to provide a video service. These home networks are sometimes professionally installed and managed by the telco. More recently, home networks, the foundation of the digital home, are beginning to move into the mainstream as an increasing number of consumers are moving beyond the basic PC activities such as file sharing. Additions and innovations can be offered via an intelligent network to extend the home network to include controls for the home ambient environment, security systems, and kitchen devices.

In general, a home network is distinguished from a small office network by its more general function and by the kinds of devices that are interconnected. The driving forces behind home networking are likely to be the practical concerns of controlling energy use and costs, a greener and more environmentally friendly use of resources and connecting digital media devices within the home. Increasingly a home networker is connecting game consoles and DVRs to their network, playing music from their PC on their home stereo, or streaming Internet video to their TV. Virtually all equipment can also be connected anywhere in the house such as phone/fax, PC & laptop, VCR, DVD, DVR or other recording device for Closed-Circuit Television (CCTV), TV's, MP3 players, CD players & Hi-Fi's, speakers, digital cameras, games consoles, smartphones and mobile phones.

Fig 6.1 – Example of home network based on ethernet



6.3 Getting set up

There are five types of home networks, two that use wire connections and three that use wireless connections: Direct cable connection, Traditional Ethernet, Alternating Current (AC) network, Phoneline network and Radio Free (RF) network. Thousands of different home network layouts exist, most are small variations on a basic set of common designs. The image above outlines one example of a common network based on an Ethernet router – one of the more standard mediums used in home networking. There is a wealth of advice and information to be found on the internet offering assistance and step-by-step guides in setting up a home networking system, suited to an individual's unique requirements. With a broadband cable or DSL connection, a home network will start with a broadband router. The job of the router is to deliver internet access to all computers in the network, so they can be online at the same time. Most routers have a browser-based configuration. Since they all need to connect to a typical cable or DSL connection, any setup differences will be mostly superficial.

A number of companies offer an integrated approache to an *intelligent network* in the home, for example, Smarthomes (www.smarthomes.ie) or Intelligent Home and Office (www.i-homeandoffice.ie/home). These companies partner with developers and a number of service providers at the beginning of residential development projects in order to install modern cabling and technology systems in new or existing homes, providing access to a

wide range of communication and entertainment services, such as integrated telephone, broadband and TV services which are distributed to each room, as well as a host of other services including PC networking, aerial, cable and satellite TV, multi room audio, programmable mood lighting, CCTV, provision for home office, and more recently, remote control of heating via a mobile telephone.

6.4 The Benefits and challenges of Home Networks

Benefits:

The benefits of networking (either wired or wireless) in homes are numerous and include:

- **File sharing:** Network file sharing between computers provides more flexibility than using floppy drives or Zip drives. Photos, music and documents can be shared and a home network can be used to save copies of important data to multiple computers

- **Printer / peripheral sharing:** Once a home network is in place, it is easy to then set up all of the computers to share a single printer or other peripheral device such as network scanners, Web cams, and CD burners.

- **Internet connection sharing:** Using a home network enables multiple family members to access the internet simultaneously without having to pay an Internet Service Provider (ISP) for multiple accounts.

- **Home entertainment:** Newer home entertainment products such as digital video recorders (DVRs) and video game consoles now support either wired or wireless home networking. Having these products integrated into your network enables online Internet gaming, video sharing and other advanced features.

Although these same benefits can be achieved with a wired home network, the following benefits are primarily realised through a wireless option:

- **Device mobility:** Notebook computers and other portable devices are more affordable than they were a few years ago. With a mobile computer and wireless home network, the consumer is not fettered to a network cord thus offering greater flexibility of room usage. It is also easier to add more computers (if they have a wireless network card) or move computers that are already networked

- **No unsightly wires:** The need for wires and cables are reduced or removed completely.

Challenges:

While there are many advantages to installing a home or office network, there can be disadvantages and challenges too:

- **Initial Costs of Installation:** Networks can be costly to set up. While in the long term networks generally save you money, the initial costs of installation can be high. Cables, network cards, and software are expensive, and the installation may require the services of a technician, depending on how many computers are involved and what type of network it is.

- **Administrative Time Requirements:** Proper maintenance of a network takes time and training. Many people may set up a network and find they have not budgeted for the required maintenance.

- **File Server Failures:** When a file server goes down, this can mean the entire network ceases to work. While file servers are no more predisposed to failure than any other computer, the failure of a file server can mean a lot more productivity loss than the failure of a workstation or stand-alone computer, since the entire network can lose access to needed programs and files.

- **Security:** With hacking and phishing becoming more prevalent, it is crucial that the appropriate security measures are put into place to protect the network (the wireless network range may spread outside of your house).

6.5 Conclusions

Currently, in Ireland, approximately 12% of households[43] with a computer have two or more computers or laptops in the home. Over a third of all households with a PC in both Europe and the US have a home network, distributed evenly between a wired and wireless option[44]. Household connectivity is growing rapidly with more and more electronic devices and networks within the home distributing and using digital information and media. International standards that enable interoperability and security in the field of home networking are seen as key to bringing value and versatility to consumers, making possible the use of diverse products, services and sources and therefore accelerating market development.

43 http://www.comreg.ie/publications/consumer_ict_survey.597.103130.p.html - ICT Consumer Survey
44 Source: 2008 Yankee Group Penetration and Usage US and Western Europe