



Commission for
Communications Regulation

Irish Communications Market

Quarterly Key Data Report

Data as of Q4 2008

Document No:	09/17
Date:	19 March 2009

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Corrigendum for the September 2008, Quarterly Key Data Report, ComReg Doc 08/101

- o Mobile subscriptions for the period Q2 2008 have been revised to 5,217,359 from 5,208,317.
- o Fixed line revenues have been revised from just under €572 million to just over €565 million for the period Q3 2008, and consequently fixed market shares based on revenues have also been revised for the following operators:
 - o Eircom from 67.4% to 68.2%
 - o BT from 14.6% to 14.8%
 - o Verizon from 3.3% to 2.3%

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The information and statistics contained within this document are derived from a variety of sources, but are mostly reliant on data obtained from authorised operators.

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Summary

As the world economy faces into a challenging economic period , the latest aggregated quarterly revenue and traffic data from Irish operators present mixed results. Below is a short synopsis of Irish electronic communications statistics for the period Q4 2008.

- As per last quarter, overall market revenues decreased this quarter by 0.7% to under €1.1 billion. This represents a fall of 4.4% on Q4 2007. Fixed revenues retain the dominant share at 49.6%, followed by mobile (46%) and broadcasting (4.4%).
- Total voice traffic minutes increased by 1.0% this quarter to over 5.1 billion minutes. This represents a 7.4% increase on Q4 2007. Mobile minutes form the majority of voice minutes at 57.9% with fixed minutes representing the remaining 42.1%. This suggests that fixed mobile substitution in terms of voice usage continues to increase.
- The top four fixed line operators by revenue market share are Eircom (68.4%), BT (14.5%), Verizon (2.2%), and Access (2.2%).
- The number of direct and indirect access paths (narrowband only) declined 0.8% this quarter and 1.8% on Q4 2007 to 2.05 million paths.
- This quarter total internet subscriptions increased to 1,437,730. This represents a growth rate of 3.7% since last quarter and 18.5% on Q4 2007.
- Narrowband internet subscriptions continued to fall, declining by 9.2% this quarter and 27.3% on Q4 2007 to 237,475.
- Broadband subscriptions continued to increase, reaching 1,200,255 this quarter. This represents an increase of 6.7% on last quarter and 35.4% on Q4 2007. Broadband per capita penetration reached 27.1% this quarter. Data from ECTA ranks Ireland in 13th place among the EU27 countries in terms of per capita fixed broadband penetration as of September 2008. According to Informa, Ireland had a household broadband penetration rate of 62.6% in Q3 2008, ranking Ireland in 10th place among the EU27 countries.
- Mobile per capita penetration (inc. HSDPA) was 121% in Q4 2008. Excluding HSDPA, the penetration rate was 114%.

- Mobile revenues increased by 3% this quarterly, but have decreased by 4.6% since Q4 2007. This increase this quarter may be explained by handset sales over the Christmas period. According to the Yankee Group data, Ireland's ARPU was €41.2 per month in Q4 2008 above the EU average of €25.8. However, this represents a 7.2% decrease for Ireland since Q4 2007 compared to a 4.5% decrease for the EU average.
- Mobile revenue market share (exc. Eircom mobile and Tesco mobile) indicates that Vodafone represents 41.1% of the market, followed by O2 (37.9%), Meteor (18.2%), and 3 Ireland (2.8%).

Notes to data:

- In this report Irish population estimates from the Central Statistics Office of 4,422,100 for April 2008 are used. This may have a downward impact on penetration rates in this quarter when compared to previous quarters.
- For Ireland's household broadband penetration rate, a figure of 1,549,511 households is used based on Informa data.
- A number of external sources are used for international comparisons. These include the Yankee Group, Informa, PriceWaterhouseCoopers, Teligen and ECTA.
- In most cases data has been rounded to one decimal place in this report.
- Q3 2008 submissions for EU Networks Ireland and Cable and Wireless were used in this report.
- Further explanations and descriptions of data supplied in this report can be found in the accompanying explanatory memorandum 09/17a.
- Extracts of data used in this report can be downloaded at www.comstat.ie

1 Overall Market Data

Data presented in this report is based on quarterly questionnaires completed by authorised operators for the period from 1st October 2008 to 31st December 2008. The report is based on submissions from 62 active operators¹.

1.1 Number of Authorisations

Figure 1.1.1 - Total Number of Authorisations

Total Authorisations	March 2009
No. of fixed and wireless authorisations	338
No. of mobile telephony authorisations	7
No. of broadcasting authorisations (incl. Cable TV, MMDS, Deflectors)	85
Total Number	430

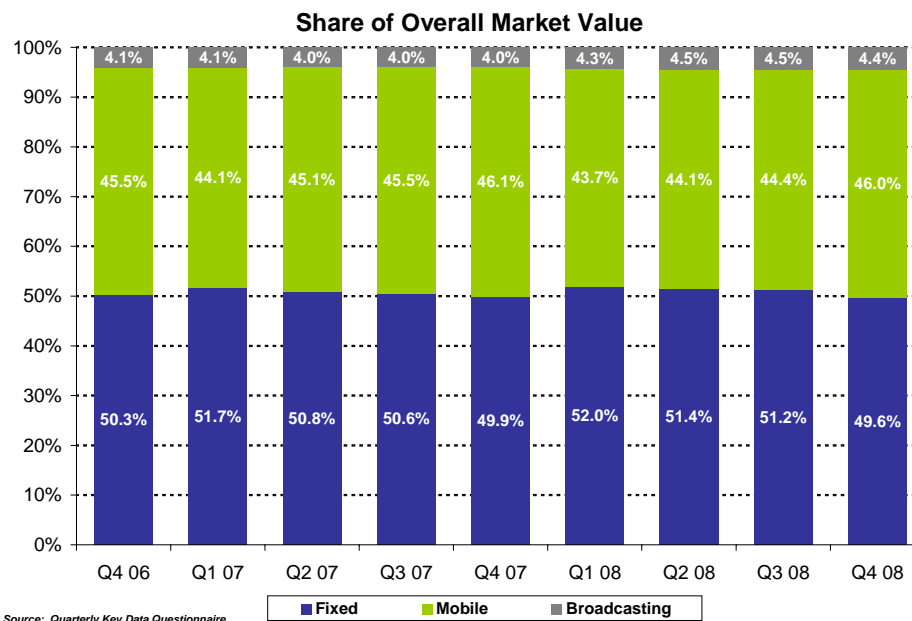
Before providing networks or services to third parties, operators are required to submit a notification to ComReg which is added to a central register of authorised operators. At the date of publication there were 430 authorised undertakings in Ireland. It should be noted that the list above refers to 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 Q3 2008 submissions for EU Networks Ireland and Cable and Wireless were used in this report.

1.2 Overall Electronic Communications Revenues²

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



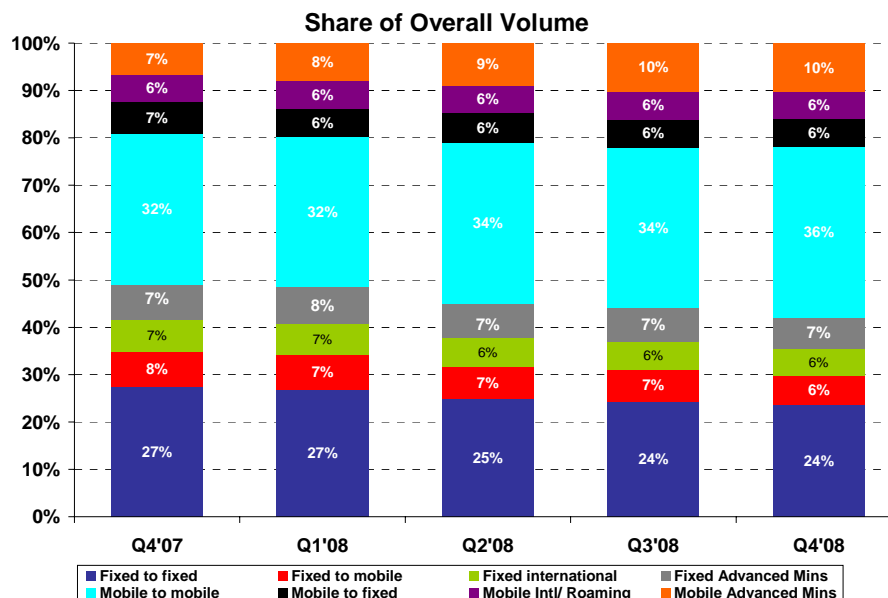
Overall electronic communications network and service revenues at the end of December 2008 were just under €1.1bn for the quarter. Annual revenues were over €4.4bn for 2008. Industry revenues decreased by 0.7% this quarter and have fallen 4.4% on Q4 2007. While fixed and broadcasting revenues declined in this quarter, mobile revenues increased by 2.9%. The increase in mobile revenue was due; in particular, to handset sales which may reflect the fact that Christmas fell in the period of this report. It should be noted that broadcasting revenues are understated in this report, as satellite TV revenues are not included in the analysis due to data availability issues.

In Q4 2008 fixed line revenues accounted for 49.6% of total electronic communications revenues, a 1.6 percentage point decrease since Q3 2008. In contrast, the mobile industry's share of revenue increased from 44.4% to 46%. Broadcasting revenues fell marginally in Q4 2008 and represent 4.4% of the market.

² For further detail on terms and definitions see ComReg Document Number 09/17a Explanatory Memorandum to Quarterly Key Data Report.

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 on both fixed and mobile networks on a quarterly basis. Voice minutes for the fourth quarter of 2008 totalled over 5.1 billion minutes. This was a 1% increase on the previous quarter when total voice minutes were just over 5 billion minutes. Since Q4 2007 total voice minutes have increased by 7.4%. It should be noted that some mobile data minutes are included under mobile advanced minutes which inflates mobile voice traffic. ComReg will seek to exclude these data volumes from the Q1 2009 Quarterly Report onwards. Mobile originating voice minutes accounted for 57.9% of all voice minutes while traffic originating on a fixed line network accounted for 42.1% of all voice minutes. Figure 1.3.2 shows the total voice traffic in Ireland at the end of Q4 2008. Fixed voice minutes declined in this quarter by 3.6% while mobile minutes increased by 4.6%. The increase in mobile minutes since Q4 2007 and the continuing decline in fixed voice minutes suggest that substitution, in terms of usage of voice services, from fixed lines to mobile phones is continuing.

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.

Figure 1.3.2 – Total Voice Traffic

	Q4'08 Mins (‘000s)	Quarterly Growth Q3'08 – Q4'08	Year-on-Year Growth Q4'07 – Q4'08
Fixed voice minutes	2,154,950	-3.6%	-7.6%
Mobile voice minutes	2,960,010	+4.6%	+21.8%
Total voice minutes	5,114,960	+1.0%	+7.4%

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 PSTN⁴ 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 November 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.

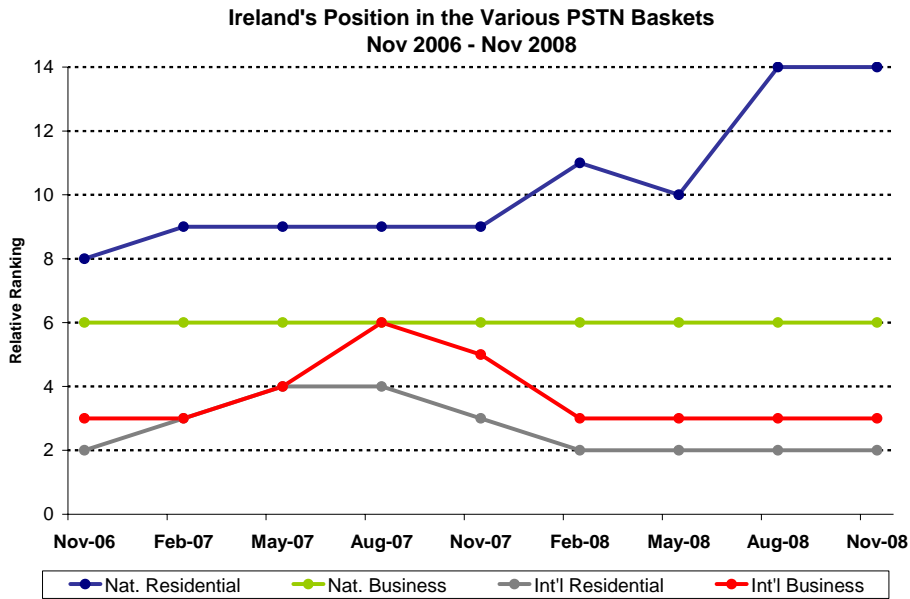
For further information on Teligen's methodology please see the accompanying memorandum ComReg 09/17a.

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.

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 November 2006, where the least expensive country based on the methodology is ranked 1st. Ireland continues to remain less expensive than the average basket cost across three of the PSTN services analysed (national business, international residential and international business baskets). This quarter, Ireland’s positions in the national residential call basket and in the national business call basket remain the same as Q3 2008 (in 14th and 6th place respectively). Ireland’s position has also remained the same for both the international residential and business baskets (in 2nd and 3rd place respectively).

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

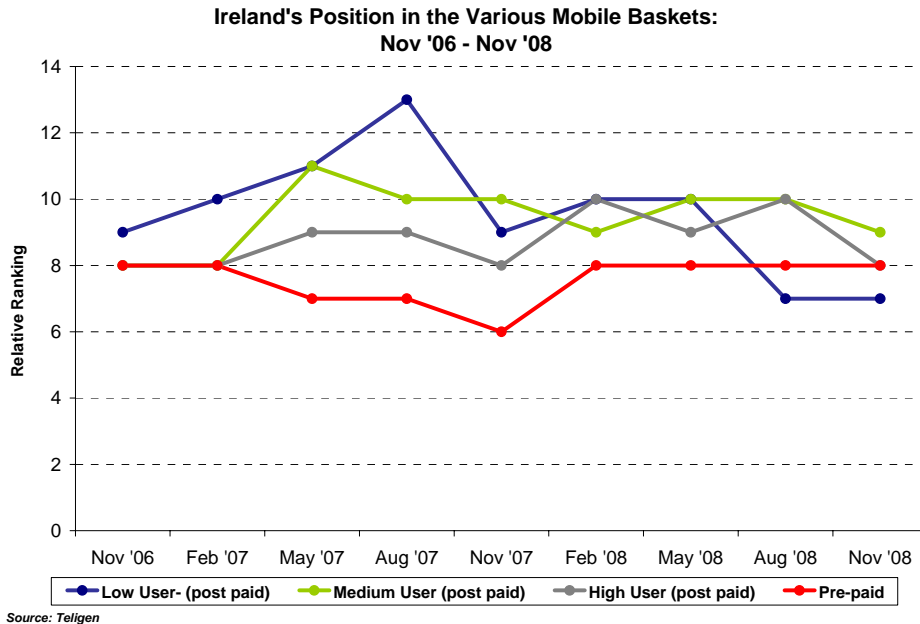


Source: Teligen

1.4.2 Mobile Baskets

Figure 1.4.2.1 shows the movement in Ireland’s position in all mobile baskets since November 2006 relative to 18 other EU countries, where the least expensive country is ranked 1st. Ireland’s position in the low user post-paid basket remains 7th since the last ranking, which is relatively less expensive than at any time in the last two years. Ireland’s position in the medium user post-paid basket is now 9th, an improvement of one place since August 2008. In the high user post-paid basket Ireland has improved by two places since August 2008 and is now 8th. Finally, in the pre-paid basket Ireland’s position has not changed since February 2008 and remains in 8th position.

Figure 1.4.2.1 – Ireland’s Position in Various Mobile Baskets

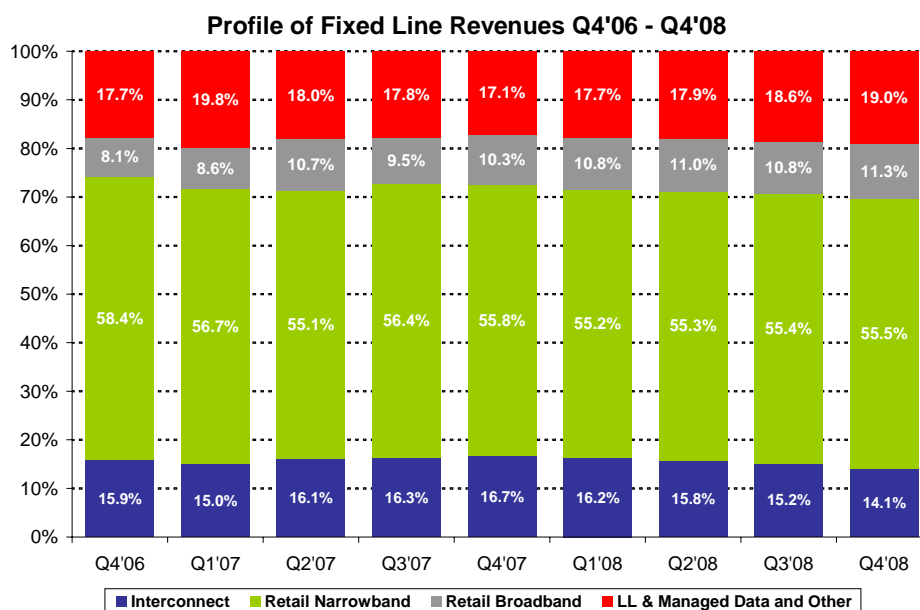


2 Fixed Market Data

2.1 Total Fixed Line Revenues

Figure 2.1.1 shows the profile of fixed line wholesale and retail revenues in Q4 2008. Total fixed line revenues at the end of December 2008 were almost €544 million. This was a 3.7% decrease on Q3 2008 revenues, which were over €565 million. In terms of the share of total fixed revenues, while interconnect revenues fell to 14.1%, other retail revenues⁵ (from leased lines, managed data and other advanced data services) increased to 19%, retail broadband increased to 11.3%, and retail narrowband increased to 55.5%. In absolute terms, retail broadband was the only category to experience growth this quarter of 1.3%. Interconnect revenues fell by 10.4% since last quarter, retail narrowband revenues fell by 3.6%, and leased line, managed and other revenues fell by 1.8%.

Figure 2.1.1 – Profile of Fixed Line Revenues



Source: Quarterly Key Data Questionnaire

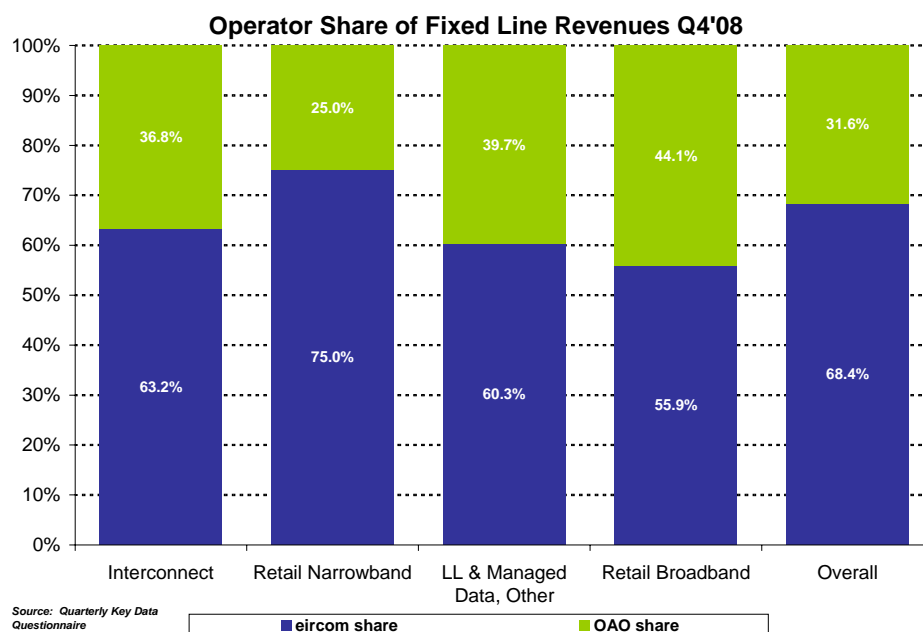
⁵ Leased line, managed services (including revenues from Partial Private Circuits) and other ancillary services including web-hosting, co-location services, directory publication & other services.

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 figure 2.1.1. Market shares are grouped within a number of revenue categories to link related services and are based on both retail and wholesale revenues; this classification does not reflect the specific markets identified in ComReg's Market Review process.

This quarter Eircom made gains relative to OAOs in its market share of interconnect, retail narrowband and retail broadband revenues but lost market share in the leased line, managed services and other category. Since Q4 2006, Eircom's interconnect market share has increased from 62% to 63%, its retail narrowband market share has declined from 77% in Q4 2006 to 75%, leased line, managed and other market share has declined from 68% to 60% and retail broadband market share has increased from 49% to 56% .

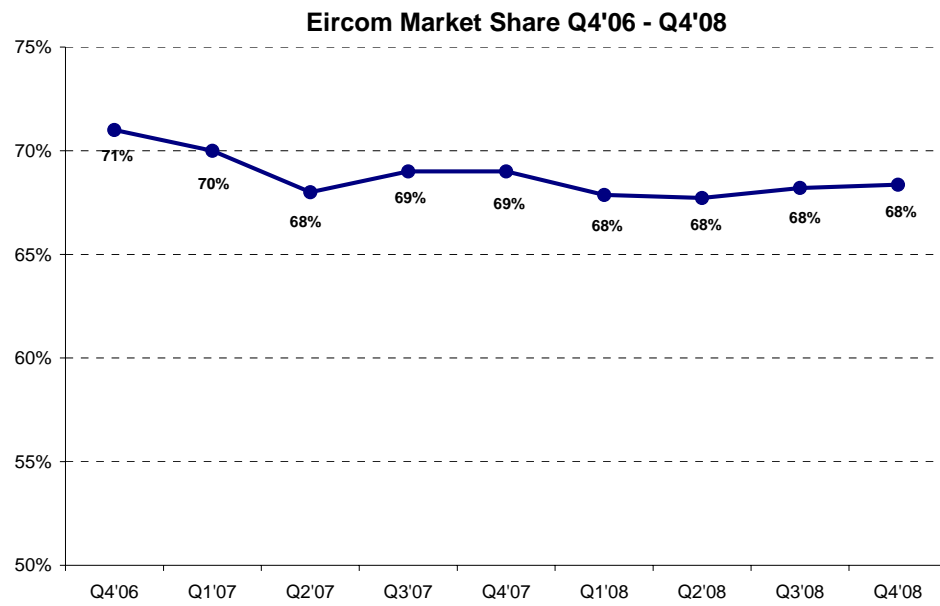
Figure 2.1.1.1 – Operator Share of Fixed Line Revenues⁶



⁶ Eircom's retail broadband share includes DSL, FWA and Satellite revenues.

Eircom’s overall share of fixed line market revenue has remained relatively constant over the last year at 68%. While Eircom’s market share increased marginally (by 0.2%) in Q4 2008, Eircom’s market share has declined by three percentage points when compared with its market share two years ago. Figure 2.1.1.2, below, shows Eircom’s market share on a quarterly basis from Q4 2006 to Q4 2008.

Figure 2.1.1.2 – Eircom’s Market Share

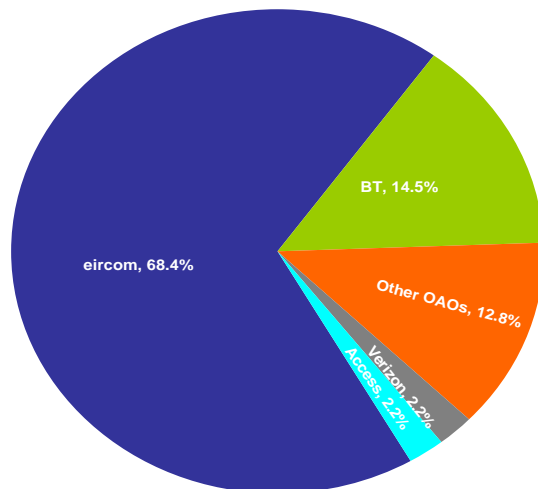


Source: Quarterly Key Data Questionnaire

Figure 2.1.1.3 below outlines revenue market shares of the total fixed market in Q3 and Q4 2008 in terms of revenue shares (of interconnect, retail narrowband, retail broadband and leased line, managed and other data) held by the incumbent fixed line operator, OAOs with a minimum 2% market share, and all other OAOs. When making comparisons, it is important to note that the market shares presented below are based on shares across all fixed wholesale and retail revenue streams while some operators may not offer products and services across all segments of the market. In Q4 2008, after Eircom, the largest revenue-earning operator in the market with 68.4% market share, ComReg estimates that the next three largest operators (BT Ireland, Verizon, and Access Telecom) contribute a further 18.9% of industry revenue. These charts are presented as an additional analysis of the fixed market and should not be interpreted as a definitive statement of retail revenue market shares. ComReg intends to review the reporting of fixed market revenues in 2009.

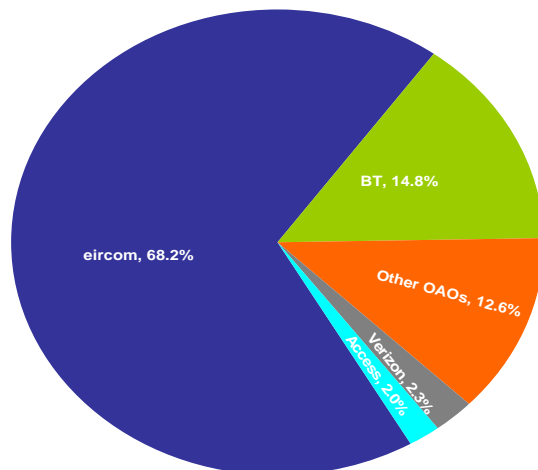
Figure 2.1.1.3 – Revenue Market Share of Fixed Line Operators

Revenue Market Share of Fixed Line Operators, Q4'08



Source: Quarterly Key Data Questionnaire

Revenue Market Share of Fixed Line Operators, Q3'08



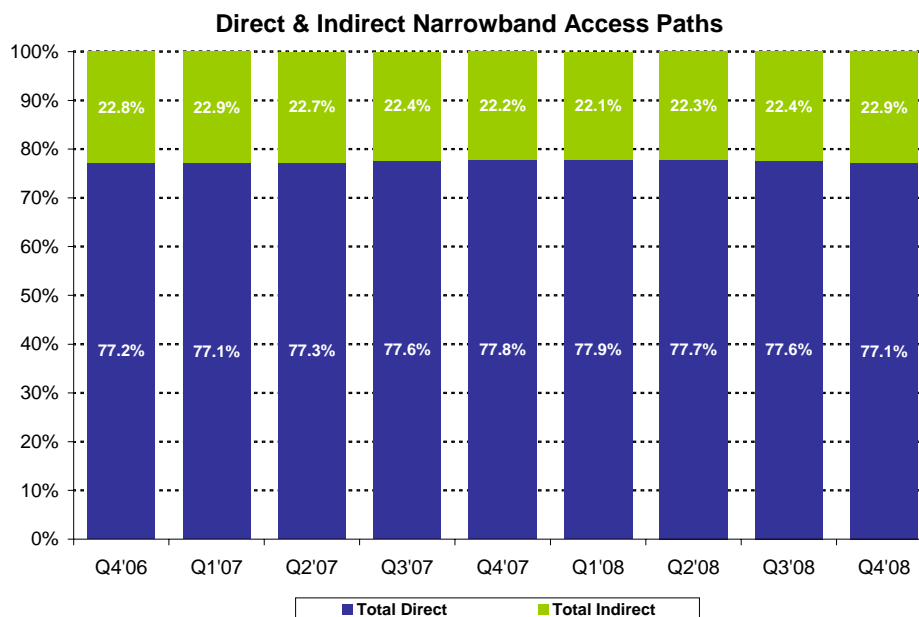
Source: Quarterly Key Data Questionnaire

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 access⁷. These paths are usually used for voice services and dial up internet access. There were just over 2.05 million direct and indirect PSTN and ISDN access paths in the Irish market in Q4 2008. This represents a decline of 1.8% since Q4 2007 and 0.8% since Q3 2008. In Q4 2008, indirect access accounted for 22.9% of all access paths in the fixed market.⁸ This represents a small increase on the previous quarter, due to a 1% increase in the overall number of indirect access paths and a similar level of decrease in direct access paths. 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

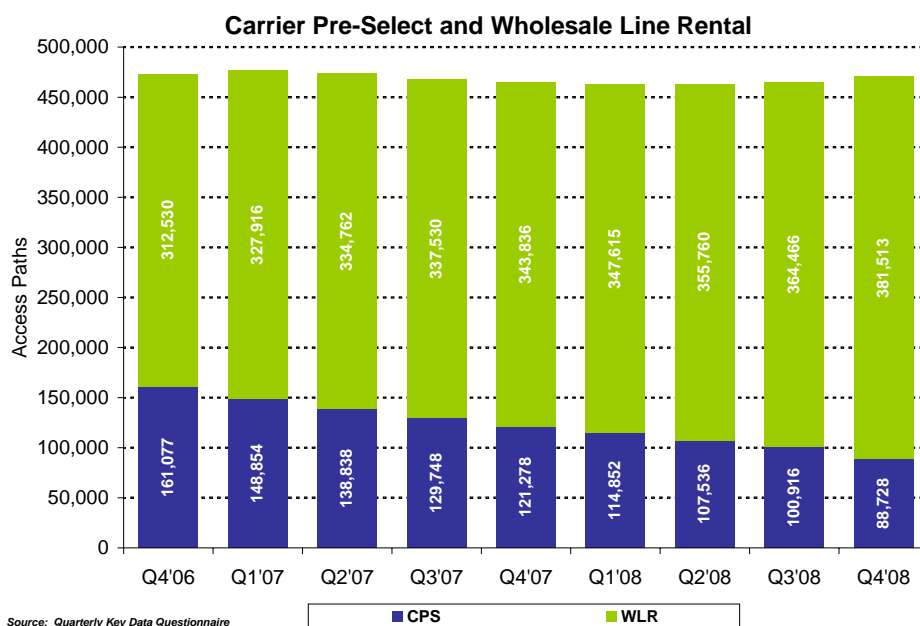
⁷ Indirect access paths relate to telephone lines provided to customers by means of carrier pre-select only or wholesale line rental. Carrier pre-select allows the user to receive all or a portion of calls from one provider and line rental from another provider (usually Eircom). Wholesale line rental (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.

⁸ 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 Q4 2008, there were over 470,000 indirect access paths in Ireland. The number of indirect access paths grew by just over 1% in Q4 2008. The number of indirect access paths has increased by a similar amount in the year to Q4 2008. 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 81% of indirect access paths compared to 66% in Q4 2006. This is in contrast to CPS which has declined by just over 15 percentage points over the same period.

Figure 2.2.2.1 – Narrowband Indirect Access Paths

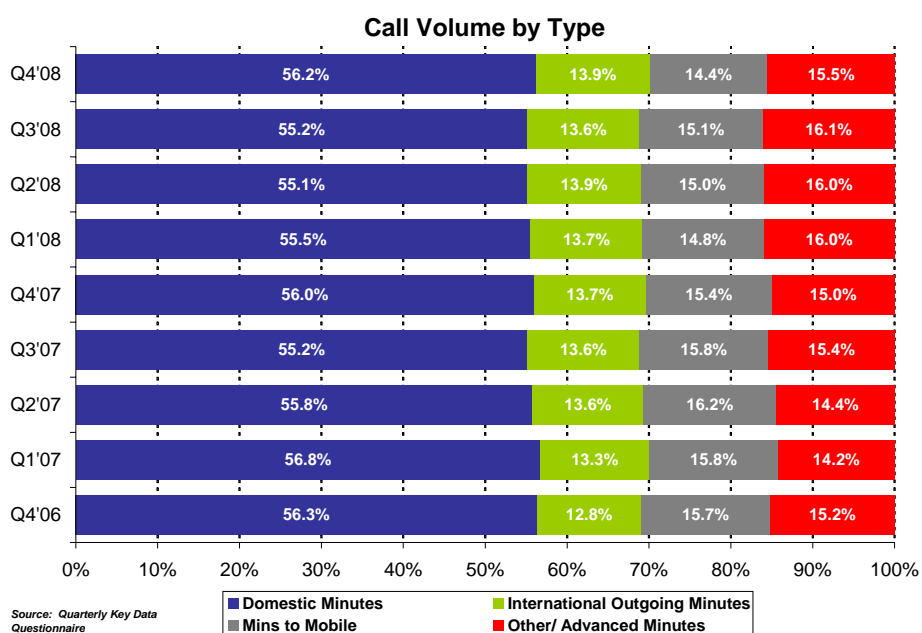


2.3 Fixed Voice Call Volumes

Fixed voice call traffic in Q4 2008 was just over 2.15 billion minutes, which was a 3.6% decrease since Q3 2008 and a fall of 7.6% since Q4 2007. The largest fall over the year has been in minutes to mobile followed by domestic minutes, international outgoing minutes and other minutes. Voice over broadband minutes now account for approximately 1.7% of this total. ComReg data, provided by operators, shows over 36.2 million VoB minutes for Q4 2008, a three-fold increase on VoB minutes of almost 11.7 million in Q4 2007. The data suggests that VoB is growing in popularity.. While the minutes reported here represent managed VoB, Skype a large provider of unmanaged VoIP calls have indicated that they are witnessing increasing use of VoIP and estimate that approximately 8% of the world’s voice minutes originate via Skype ⁹.

In terms of year on year traffic, minutes to mobile have dropped by 13.5% since Q4 2007, domestic minutes declined by approximately 7.2%, international outgoing minutes declined by 6% and other minutes fell by 4.3%. Since this analysis began in Q4 2006, 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 an increase in international outgoing minutes. Other categories have remained relatively consistent over the period. 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 Q4 2006.

Figure 2.3.1 – Fixed Voice Call Volume (Minutes)¹⁰



⁹ <http://news.zdnet.co.uk/communications/0,1000000085,39589439,00.htm>

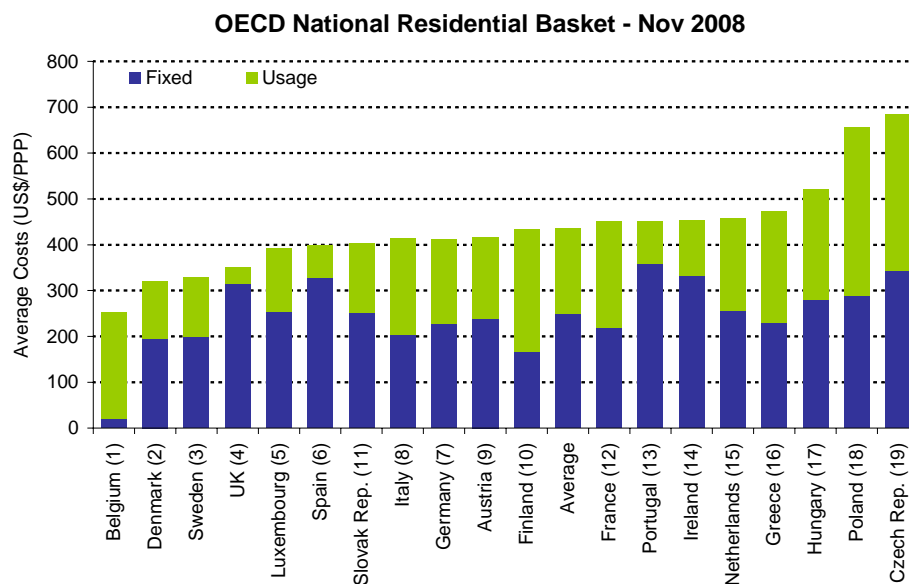
2.4 PSTN Pricing Data

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 available¹¹. Using this methodology, data is presented using USD (\$) converted to 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 November 2008 Ireland ranked in 14th position, behind the average of the 19 EU countries in terms of the most competitive pricing for this basket. Ireland’s position has remained unchanged since August 2008.

Figure 2.4.1.1 - OECD National Residential Basket – November 2008¹²



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

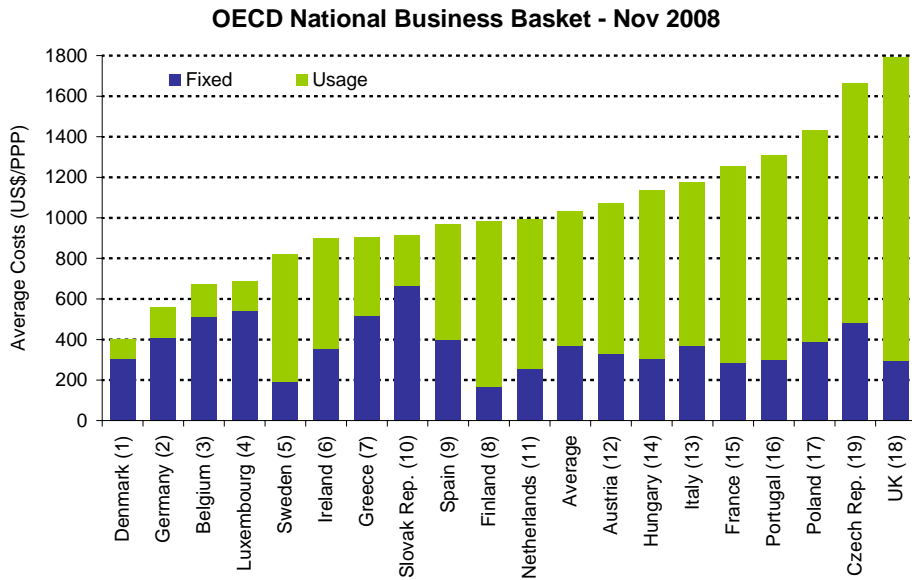
10 Domestic Calls include local & national calls. Advanced service and other minutes include minutes to premium rate numbers, freephone numbers, callsave, operator services, VoB minutes, VPN minutes, payphones and other services.

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

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 – November 2008



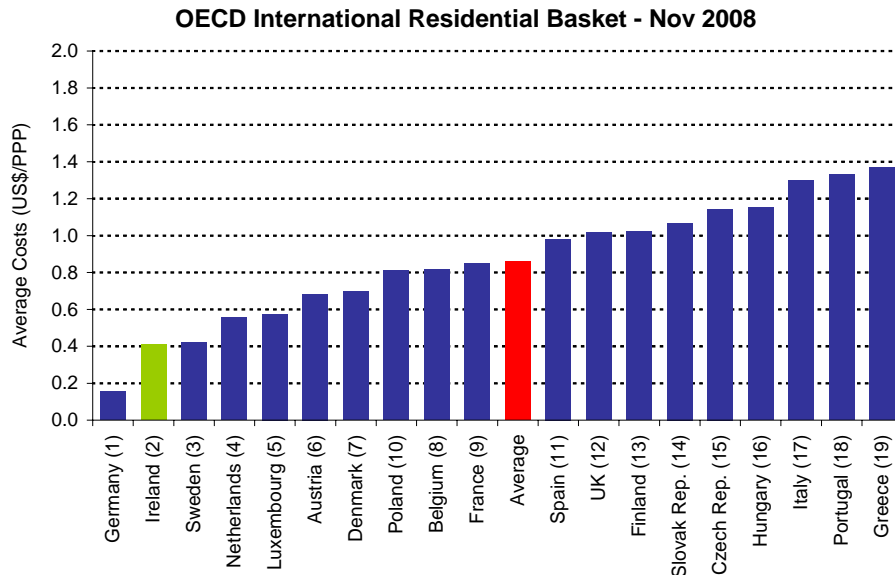
Source: Teligen
 To note: The numbers in brackets represent each Member State's respective rankings as at August 2008

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

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. This chart shows that Ireland continues to maintain second position among the 19 EU countries. Ireland has ranked in second place since February 2008.

Figure 2.4.3.1 - OECD International Residential Basket – November 2008¹³



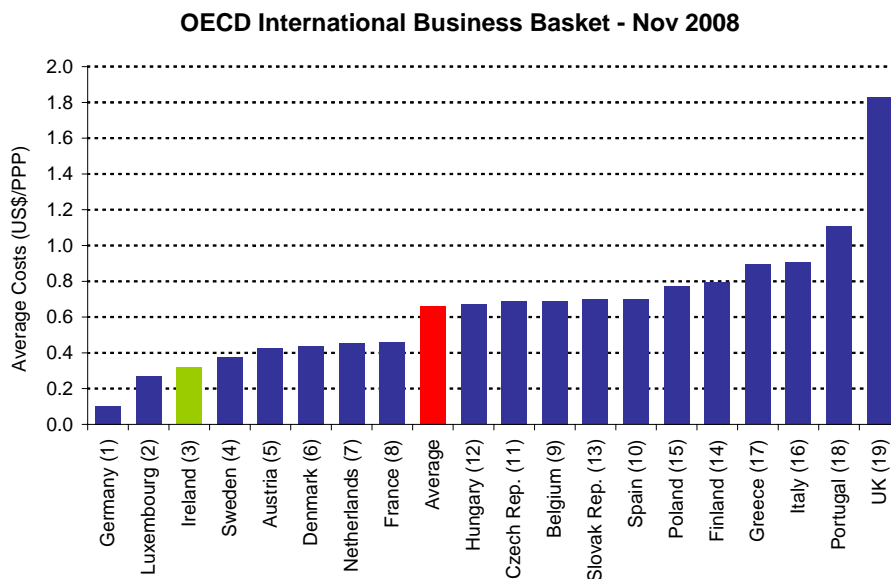
Source: Teligen
 To note: The numbers in brackets represent each Member State's respective rankings as at August 2008

¹³ 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. Ireland has maintained its ranking of third place since February 2008 and is below the average of the 19 EU countries.

Figure 2.4.4.1- OECD International Business Basket – November 2008



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

3 Internet and Broadband

3.1 Total Internet Subscriptions

At the end of Q4 2008, there were over 1.4 million active internet subscriptions in Ireland. This is a 3.7% growth on the previous quarter and an 18.5% increase on the same period last year. Overall, narrowband subscriptions continued to decline in Q4 2008. Flat-rate narrowband subscriptions fell by 9.7% and metered narrowband subscriptions decreased by 9.1%.

Total broadband subscriptions continued to grow strongly in the quarter, up by 6.7% since Q3 2008, the same growth for the previous quarter. If mobile broadband (HSDPA) subscriptions are excluded, growth for Q4 2008 was 4% and for the year since Q4 2007, 17.5%.

Mobile broadband (via HSDPA, HSPA and 3G) continues to show strong signs of growth and increased by 15% in Q4 2008. In the twelve months to December 2008 mobile broadband subscriptions increased by 142%. 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

Subscription Type	Q4'08 Subs	Quarterly Growth Q3'08- Q4'08	Year-on-Year Growth Q4'07- Q4'08
Metered Narrowband	204,181	-9%	-27%
Flat Rate Narrowband	33,294	-10%	-31%
DSL Broadband¹⁴	660,025	+4%	+20%
Other Broadband¹⁵	540,230	+10%	+61%
Total Internet Subscriptions	1,437,730	+4%	+19%

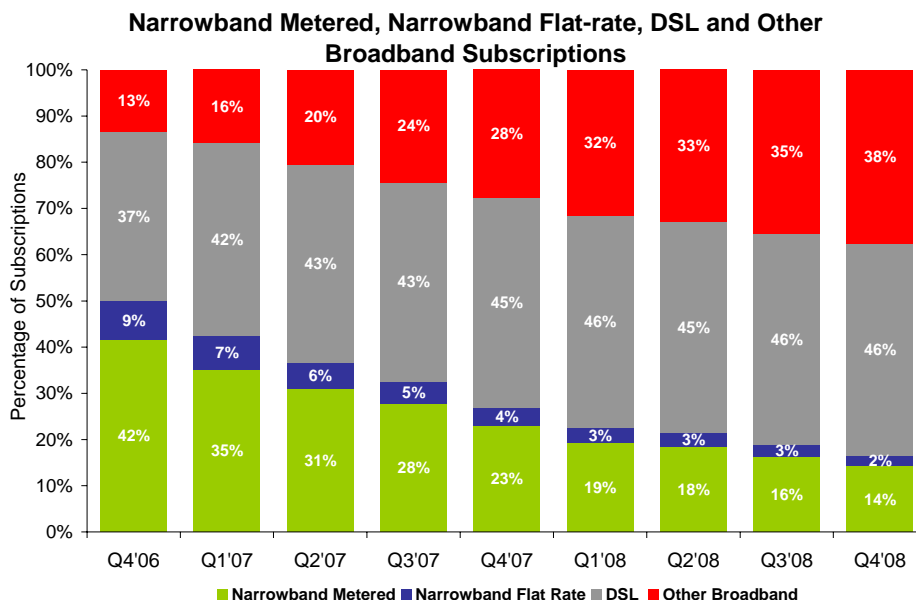
¹⁴ DSL refers to a digital subscriber line, the means by which broadband speeds (i.e. in excess of 144k downstream) are delivered over the copper telecoms network.

¹⁵ 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 figure 3.1.1. Broadband subscriptions account for 83.5% of all internet subscriptions. Figure 3.1.2 provides a profile for the periods Q4 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.

DSL subscriptions alone account for 45.9% of all internet subscriptions. DSL’s share of total internet subscriptions has increased by nine percentage points over the last two years while metered narrowband and flat-rate narrowband’s combined share has fallen by 35 percentage points over the same period. Since mobile broadband subscriptions were included in Q2 2007, the “Other Broadband” category has grown by 18 percentage points. It should also be noted that while narrowband subscriptions made up 51% of total internet subscriptions in 2006, they now account for only 16%.

Figure 3.1.2 – Profile of Active Internet Subscriptions

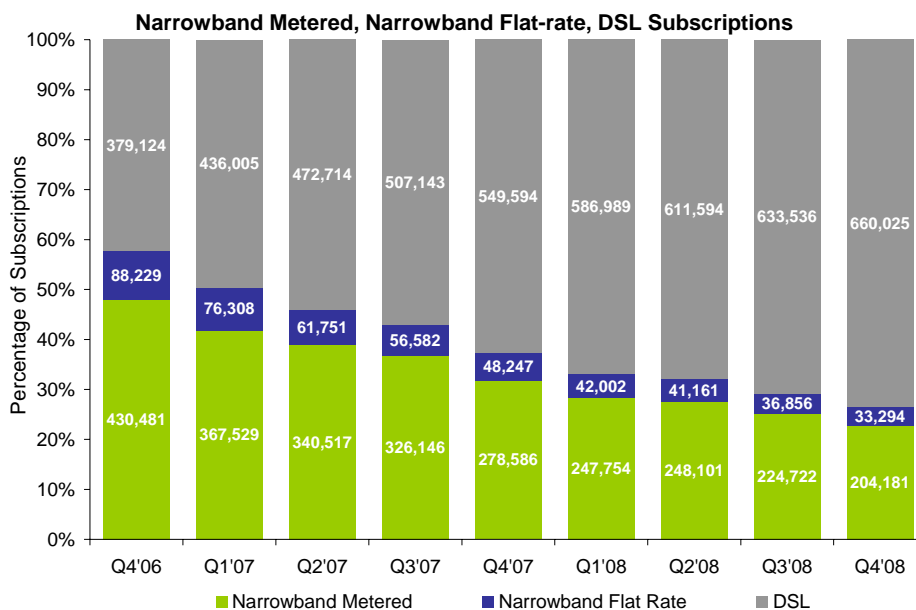


Source: Quarterly Key Data Questionnaire

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 897,500 active internet subscriptions over the copper telecoms network at the end of December 2008. This was a slight increase of 2,386 (0.3%) in the total number of copper-based subscriptions since Q3 2008 and a reversal of the decline experienced in the last quarter.

DSL accounted for 73.5% of copper-based internet subscriptions in Q4 2008 compared to 70.8% in Q3 2008. Metered narrowband subscriptions accounted for 22.8% of internet subscriptions over copper compared to 25.1% in Q3 2008. Flat-rate narrowband internet subscriptions made up the remaining 3.7% of copper-based internet subscriptions compared to 4.1% in the previous quarter.

Figure 3.1.3 – Profile of Copper Based Internet Subscriptions



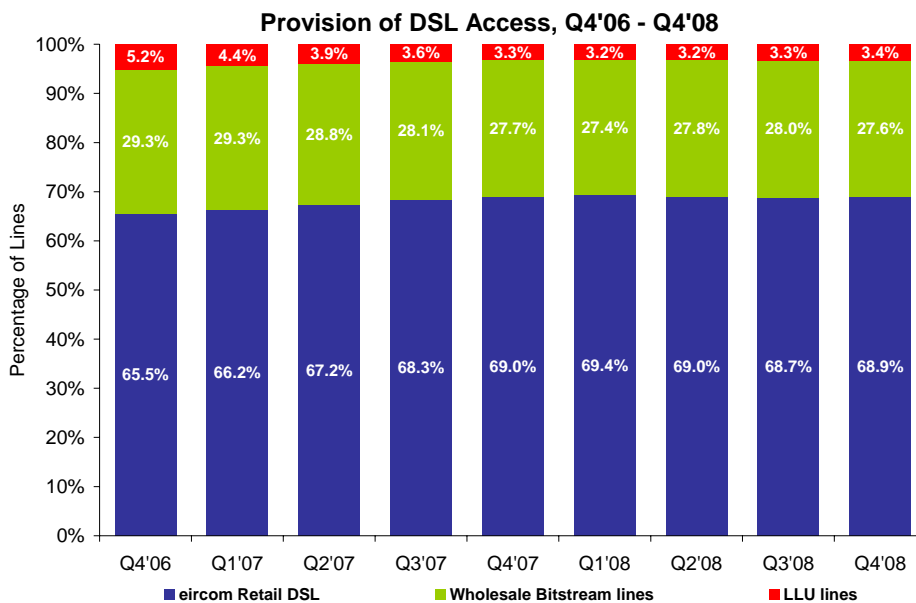
Source: Quarterly Key Data Questionnaire

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 68.9% of all DSL subscriptions in December 2008. Retail DSL may also be provided by alternative operators (OAOs) who use either wholesale bitstream, which enables OAOs to resell another operator’s DSL service, or by offering DSL-based broadband using local-loop unbundling (LLU).

At the end of December 2008, 27.6% of all DSL lines were provided by OAOs using wholesale bitstream, and the remaining 3.5% of DSL lines were provided to subscribers by OAOs using local-loop unbundling. Eircom’s market share of retail DSL lines has grown by three percentage points over the last two years.

Figure 3.2.1 - Provision of DSL Access

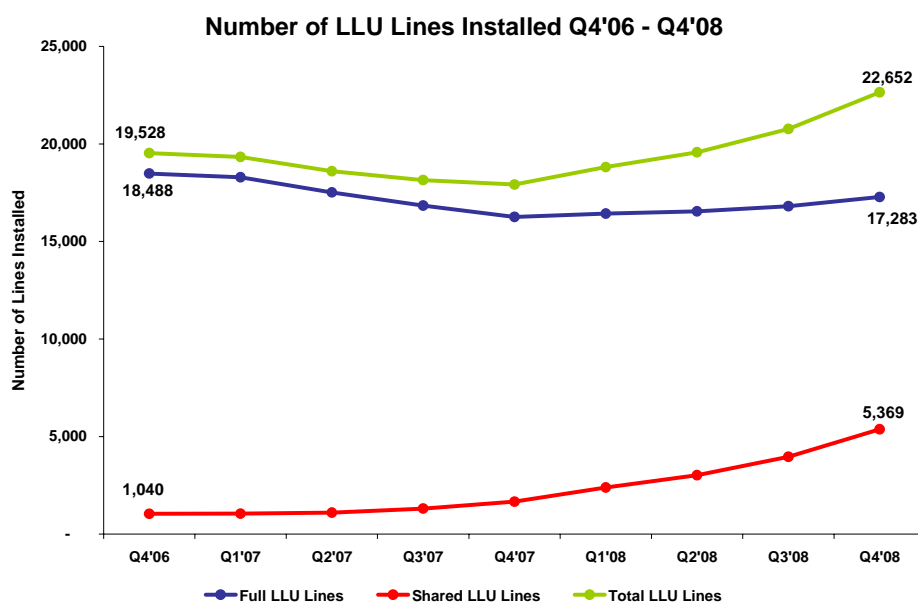


Source: Quarterly Key Data Questionnaire

Figure 3.2.2 shows the number of unbundled lines classified by shared and full¹⁶ status. Between Q4 2006 and Q4 2007 the total number of LLU lines declined by approximately 8.2%. However, in the twelve months to December 2008 this trend was been reversed. In Q4 2008 total LLU lines grew by 9.1%, while the annual growth was 26.4%.

Fully unbundled lines accounted for 76.3% of total LLU lines in Q4 2008. The proportion of shared lines relative to the total number of LLU lines has increased over the last two years. In Q4 2006, shared LLU lines accounted for only 5.3% while in Q4 2008 they accounted for 23.7%.

Figure 3.2.2 – Number of Local Loops Unbundled



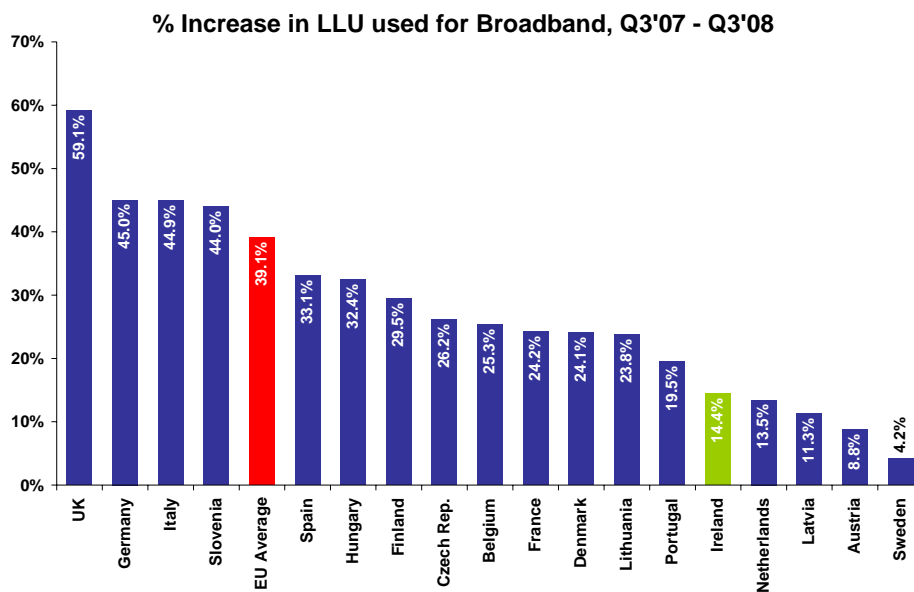
Source: Quarterly Key Data Questionnaire

¹⁶ Full LLU and shared LLU two of the ways a copper loop may be unbundled. While full LLU assigns the entire copper loop to the leasing operator, shared LLU enables other operators and the incumbent to share the same line. Consumers can acquire voice and data services from an operator or alternatively data services alone while retaining the voice services of the incumbent.

Although the number of LLU lines has increased over the last twelve months, figure 3.2.3 shows that Ireland still lags the EU average in terms of the growth in LLU lines. Using data as of Q3 2008 provided by the European Competitive Telecommunications Association (ECTA) LLU lines for Ireland grew by 14.4% in the year to September 2008.

The average European growth was 39.1%. The UK, Germany and Italy also showed significant, growth during this period.

Figure 3.2.3 – Growth in European Unbundled Local Loops



Source: ECTA B'band Scorecard Q3'08
 Note: L'bourg, Cyprus and a number of other countries excluded for charting purpose

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.

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 in the Q2 2007¹⁷ report.

At the end of December 2008, there were 1,200,255 broadband subscriptions in Ireland. This represents a growth rate of 6.7% in the number of subscriptions for this quarter. FWA subscriptions, which had declined over the last couple of quarters, increased slightly by 0.6% in Q4 2008. Annual growth for FWA subscriptions is flat.

Mobile broadband showed the highest growth of all platforms this quarter, growing by 15% in Q4 2008. Between Q4 2007 and Q4 2008 mobile broadband subscriptions have increased by 142% while total broadband subscriptions grew by 35.4%.

Figure 3.3.1 – Broadband Subscriptions¹⁸ and Growth Rates by Platform

Platform	Q4'08 Subs	Quarterly Growth Q3'08 – Q4'08	Year-on-Year Growth Q4'07 – Q4'08
DSL	660,025	+4%	+25%
Cable	104,133	+9%	+20%
FWA	118,497	+1%	0%
Other¹⁹	8,691	-9%	+5%
Sub-Total	891,346	+4%	+18%
Mobile Broadband	308,909	+15%	+142%
Total	1,200,255	+7%	+35%

¹⁷ In Q2 2007 an estimate of 45,000 mobile broadband subscriptions was used.

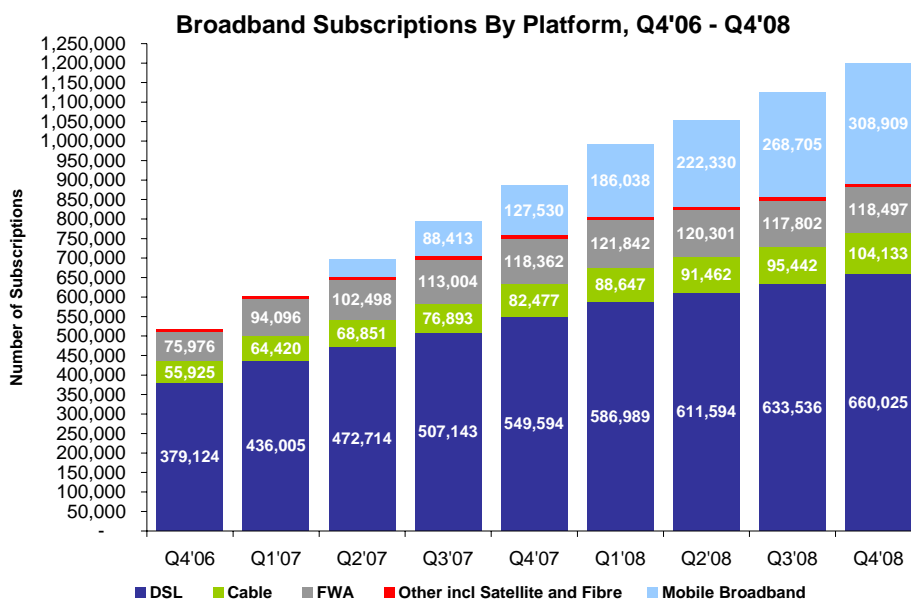
¹⁸ ComReg notes that the data provided in this section relates to active subscriptions reported by operators. It takes into account multiple active subscriptions to broadband offerings by individual subscribers.

¹⁹ Other Broadband includes Satellite and Optical Fibre broadband subscriptions.

DSL remains the largest broadband access platform in terms of subscriptions, accounting for 55% of all broadband subscriptions, which is a slight decrease on DSL's share of broadband since Q3 2008. Other platforms account for the remaining 45% 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 Q4 2006. Although DSL remains the main means of broadband access to the internet, mobile broadband has been the largest contributor to new broadband growth in each quarter since Q1 2008. In total, there were 75,175 net additions to broadband this quarter, compared to 70,160 in Q3 2008, an increase of 7.2%.

Mobile broadband grew by 40,204 customers in Q4 2008, a 13% decline on the number of mobile broadband additions in the last quarter. DSL added 26,489 subscriptions in Q4 2008, an increase of 20.7% on Q3 2008. However, since Q4 2006, net DSL additions have declined by 55.7%.

In contrast, net additions to cable more than doubled this quarter compared to Q3 2008. Since Q4 2006, net additions to cable have increased by 34.9%. FWA subscriptions increased very slightly while subscriptions in the “Other Broadband” category actually decreased.

Figure 3.3.3 – Quarterly Broadband Net Additions

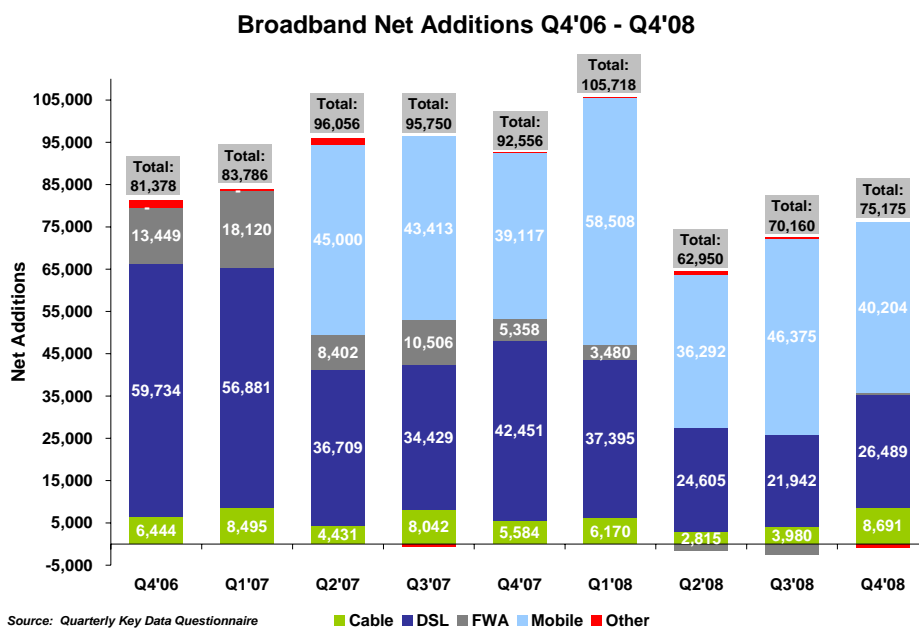


Figure 3.3.4 provides an estimate of the proportion of business and residential subscriptions to DSL, cable, fixed wireless, mobile broadband, fibre and satellite broadband services. At the end of December 2008, 78.4% of broadband subscriptions on all platforms were residential broadband subscriptions, compared to 77.5% in Q3 2008. 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

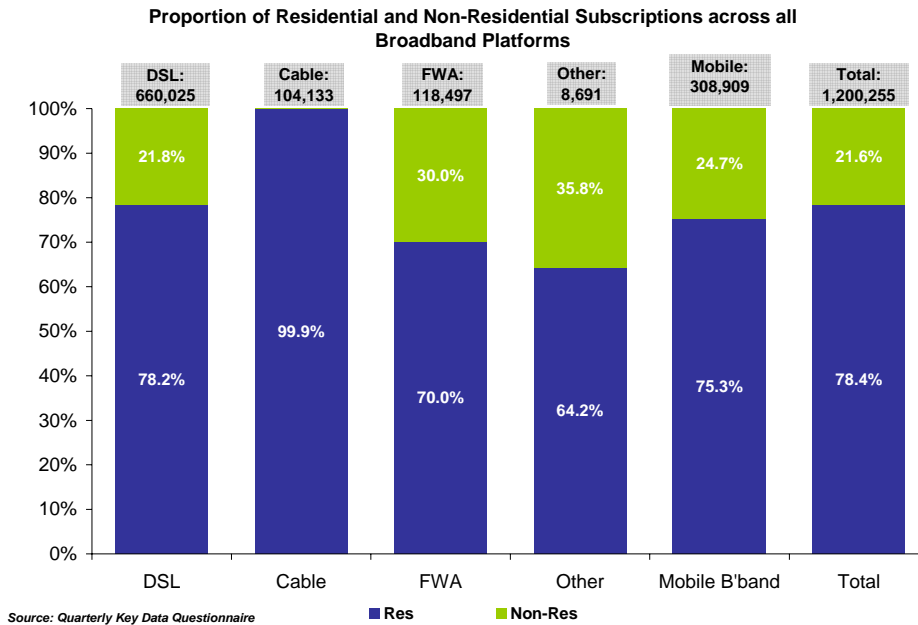


Figure 3.3.5 illustrates the breakdown of broadband subscriptions by contracted speed across all broadband platforms. The chart shows that both residential and business users are more likely to subscribe to packages of between 2Mbps - 10Mbps. The trend of customers moving to higher speeds has continued in Q4 2008. Four per cent of residential users have subscriptions in the >10Mbps range compared to only 1.6% in Q3 2008. The percentage of both residential and business subscriptions in the lowest speed range has remained relatively constant since the last quarter.

It is interesting to note that 68% of business subscriptions are in the 2Mbps – 10Mbps range this quarter compared to 72.6% in Q3 2008, while 25% of business subscriptions are in the 1Mbps – 1.99Mbps range this quarter compared to 19.4% in Q3 2008.

Figure 3.3.5 – Broadband Subscriptions by Contracted Download Speeds

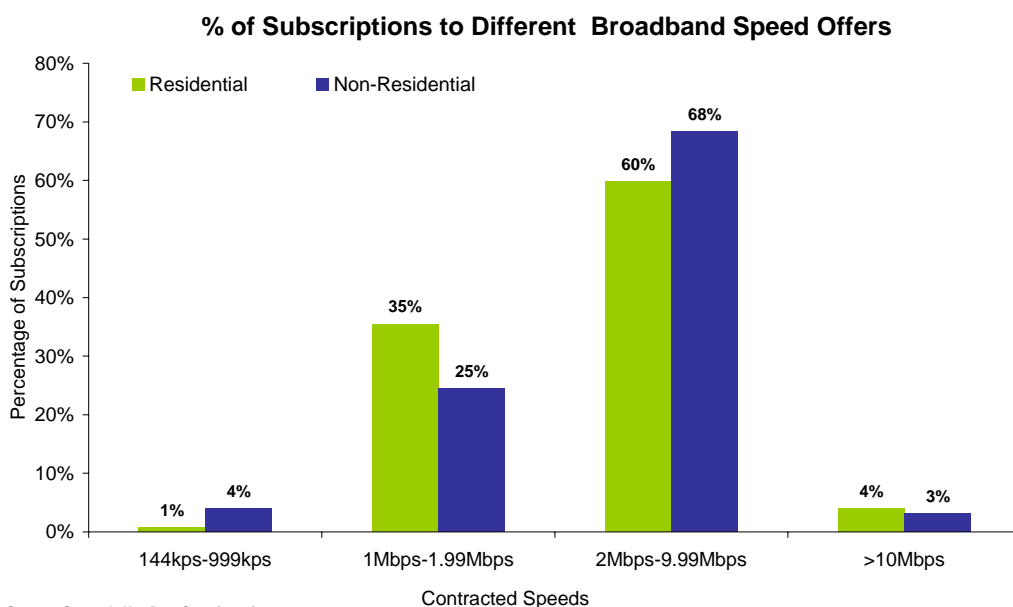


Figure 3.3.6 illustrates Eircom’s market share of total broadband subscriptions when compared to other authorised operators’ (OAO) share of overall broadband subscriptions, including DSL and alternative access technologies (which includes mobile broadband subscriptions). In this period, Eircom’s market share was 37.9% for retail broadband subscriptions, compared to 38.7% in Q3 2008. The remaining 62.1% share 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 3.3.6 – Market Share of Total Broadband Market

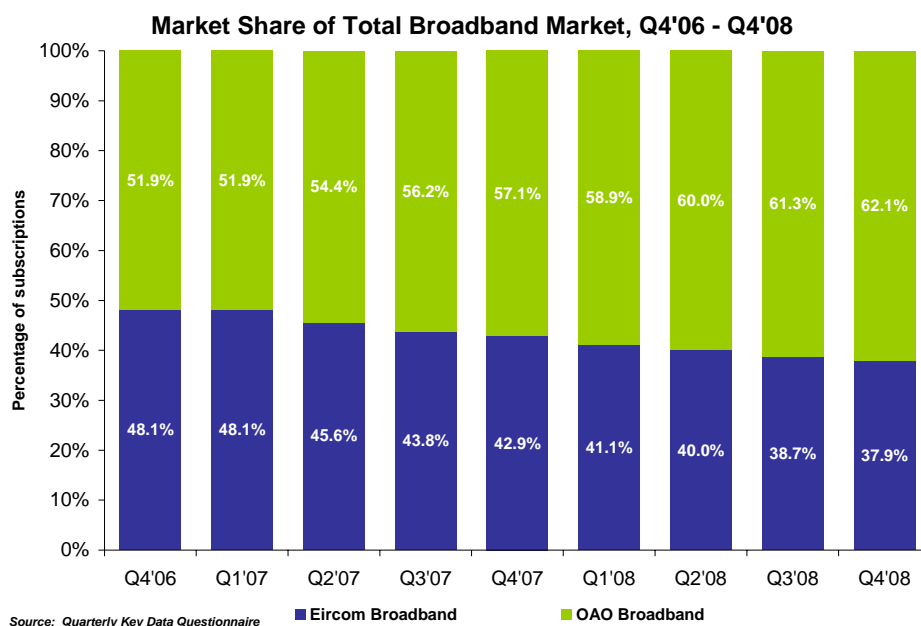
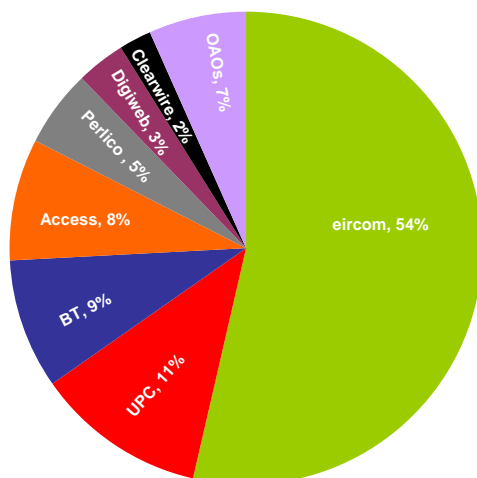


Figure 3.3.7 is a new chart published for the first time this quarter using fixed broadband subscriptions data provided by operators. ADSL, cable modem, FWA, satellite and FTTX subscriptions are all included in the total broadband subscriptions figure which is used to calculate market shares.

Eircom and the six other operators with a market share of more than 2% are included in the chart. OAOs refers to all those operators with less than 2% of total fixed broadband subscriptions. According to the data received from operators for Q4 2008, Eircom has 54% of total fixed broadband subscriptions, while UPC has 11% of subscriptions. BT has a 9% market share and Access, Perlico, Digiweb and Clearwire together make up 18% of the fixed broadband market. All other operators combined account for 7% of the fixed broadband market in terms of subscriptions.

Figure 3.3.7 – Subscription Market Share of Fixed Broadband Market

Fixed Broadband Subscriptions Market Share, Q4'08



Source: Quarterly Key Data Questionnaire

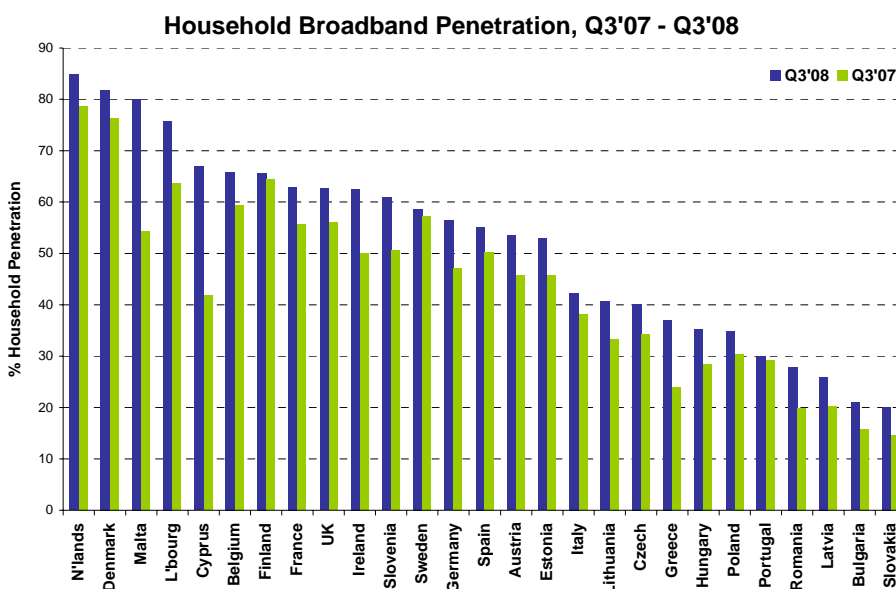
In presenting broadband penetration benchmarks for European countries, ComReg uses the OECD, the European Competitive Telecoms Association (ECTA) or European Commission data. ComReg will endeavour to publish this data on a quarterly basis as detailed in Figure 3.3.8. The data presented is based on the 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
European Commission	March 2009	January 2009	Q1'09
ECTA	September 2009	March 2009	Q2'09
OECD	October 2009	June 2009	Q3'09
ECTA	March 2010	December 2009	Q4'09

Figure 3.3.9 illustrates a year on year (Q3 2007 – Q3 2008), cross country comparison of household broadband penetration rates. The chart is based on data provided by Informa UK Ltd. Based on the data used by Informa²⁰, Ireland's household penetration for Q3 2008 is 62.6%. Ireland ranks 10th among the 27 countries benchmarked, compared to 12th last quarter. The Netherlands and Denmark have the highest household broadband penetration with 84.8% and 81.9% respectively.

Figure 3.3.9 – EU Household Broadband Penetration Rates



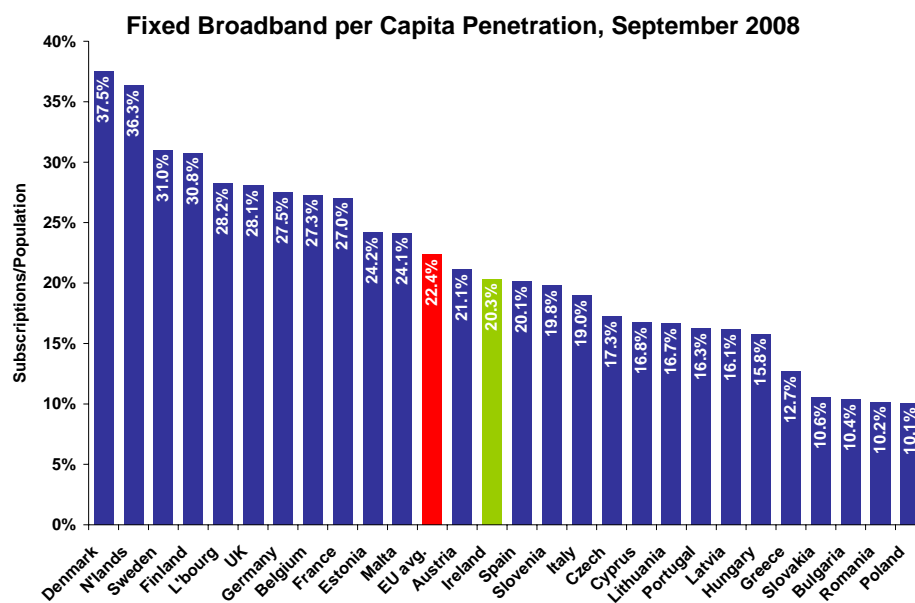
Source: Informa UK Ltd. World Broadband Information Service, all rights reserved

²⁰ Informa estimate that there are 1,549,511 households in Ireland as of Q3 2008.

The total number of broadband subscriptions in Ireland for Q4 2008 was 1,200,255. The broadband per capita penetration rate in Q4 2008 was 27.1% compared to 25.9% in the last quarter. When mobile broadband is excluded, the penetration rate is 20.2%. These figures are based on a population of 4,422,100 from Central Statistics Office (CSO) data.²¹

Figure 3.3.10 illustrates fixed broadband per capita penetration rates for EU countries as at September 2008. ECTA has calculated Ireland’s broadband penetration at 20.3% on the basis of a population size of 4,209,000 in September 2008. Ireland ranks two places below the EU27 average of 22.4%. As was the case with household penetration, Denmark and the Netherlands are ranked the top two countries with 37.5% and 36.3% respectively.

Figure 3.3.10 – EU Fixed Broadband Penetration Rate

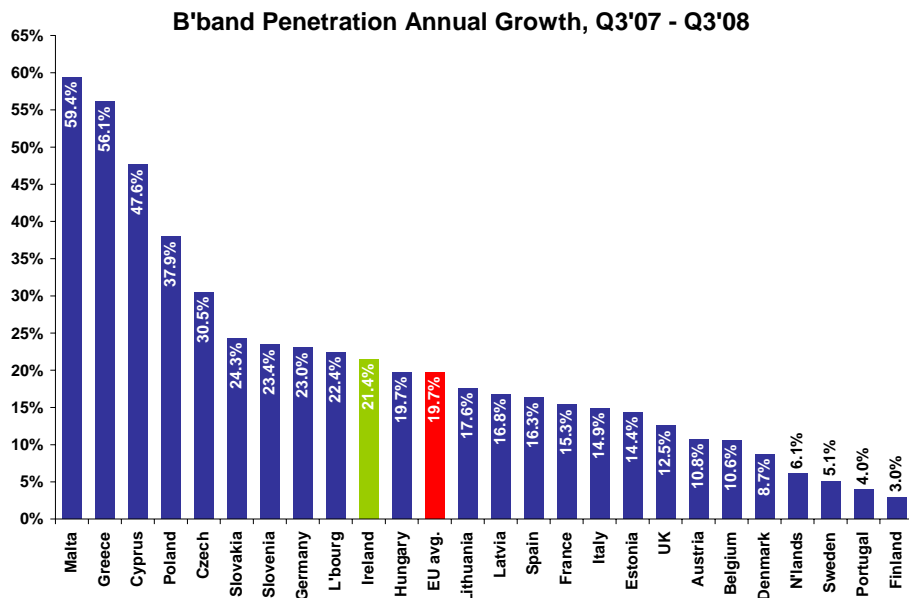


Source: ECTA B'band Scorecard Q3'08

²¹ <http://www.cso.ie/releasespublications/documents/population/current/popmig.pdf>

Figure 3.3.11 shows that Ireland’s annual growth in broadband penetration between Q3 2007 and Q3 2008 was ahead of the European average. Some countries, like Malta and Greece, are starting from a low base. Ireland’s growth during the twelve months to September 2008 was 21.4%, placing it tenth out of the twenty five countries charted.

Figure 3.3.11 – EU Broadband Penetration Growth



Source: ECTA B'band Scorecard Q3'08

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 points²².

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.

The number of WiFi access points has increased by 29% between Q4 2007 and Q4 2008. The number of WiFi Hotspots has increased by 14% since Q4 2007. WiFi minutes of use are published for the first time this quarter. In Q3 2008 there was approximately 13.4 million WiFi minutes of use in Ireland.

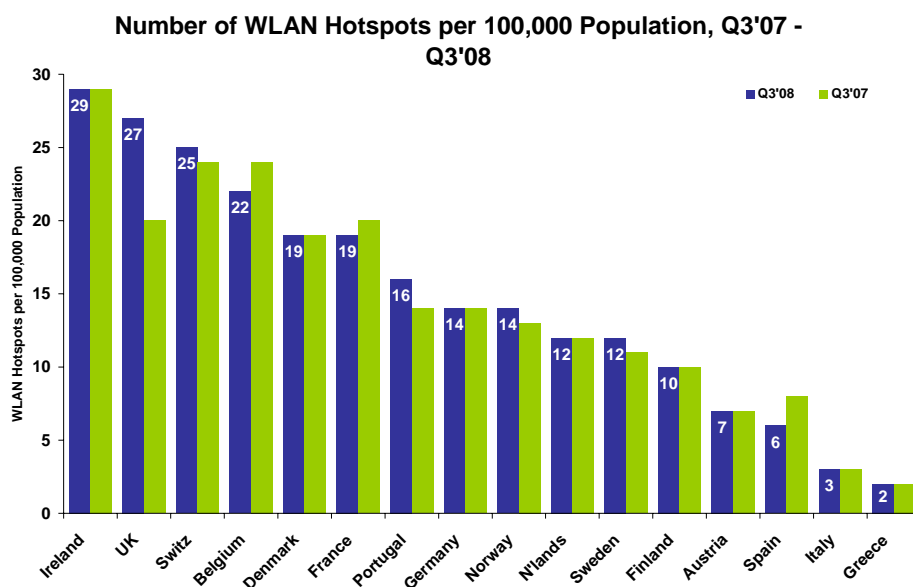
Figure 3.4.1 – WiFi Hotspots, Access Points and Minutes of Use

	Q4 2008	Q3'08-Q4'08 Growth	Q4'07-Q4'08 Growth
WiFi Hotspots	1,429	+5%	+14%
WiFi Access Points	3,296	0%	+29%
WiFi Minutes of Use	12,854,000	-	-

²² 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.

Figure 3.4.2 below shows a comparison of public WLAN hotspots among 16 European countries based on data from Informa. The number of WLAN hotspots per 100,000 population has remained constant for Ireland over the year to September 2008. The UK saw a large increase in its number of hotspots per 100,000 population and is now in second position, while Ireland remains first among the countries in the chart.

Figure 3.4.2 – European Public WLAN Hotspots



Source: Informa UK Ltd. World Broadband Information Service, all rights reserved

3.5 ADSL Pricing Data²³

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.

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 chart.

The speed category of 1-4Mbps was 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.

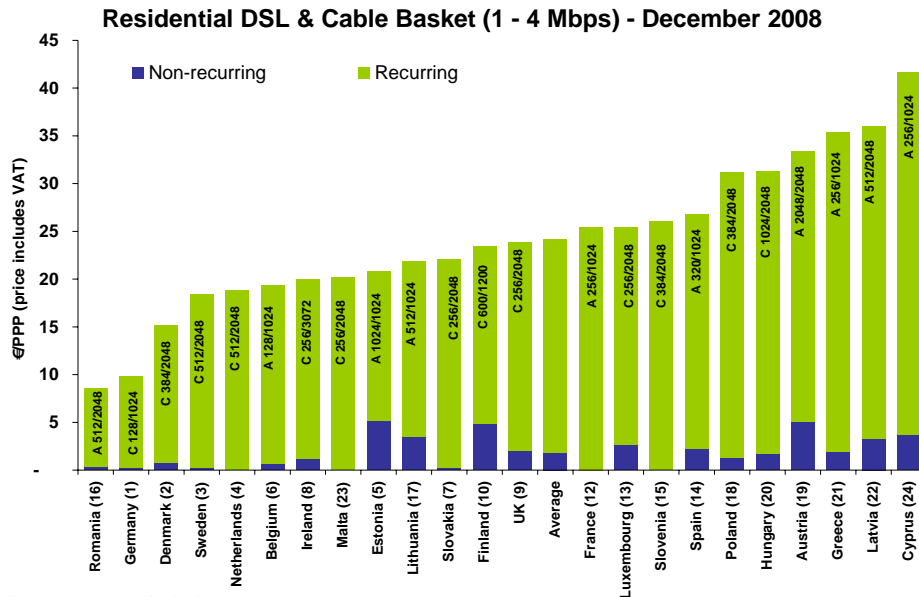
Further information on the composition of the broadband basket can be found in the Explanatory Memorandum which accompanies this report²⁴.

²³ 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.

²⁴ ComReg Document 09/17a

The lowest monthly residential DSL & cable baskets for the 1-4 Mbps speed category are charted in figure 3.5.1. Ireland ranks in 7th place when the results for this group of 23 European countries are compared. Ireland is seven places ahead of the European average. The Irish broadband product benchmarked is UPC’s Broadband Value package.

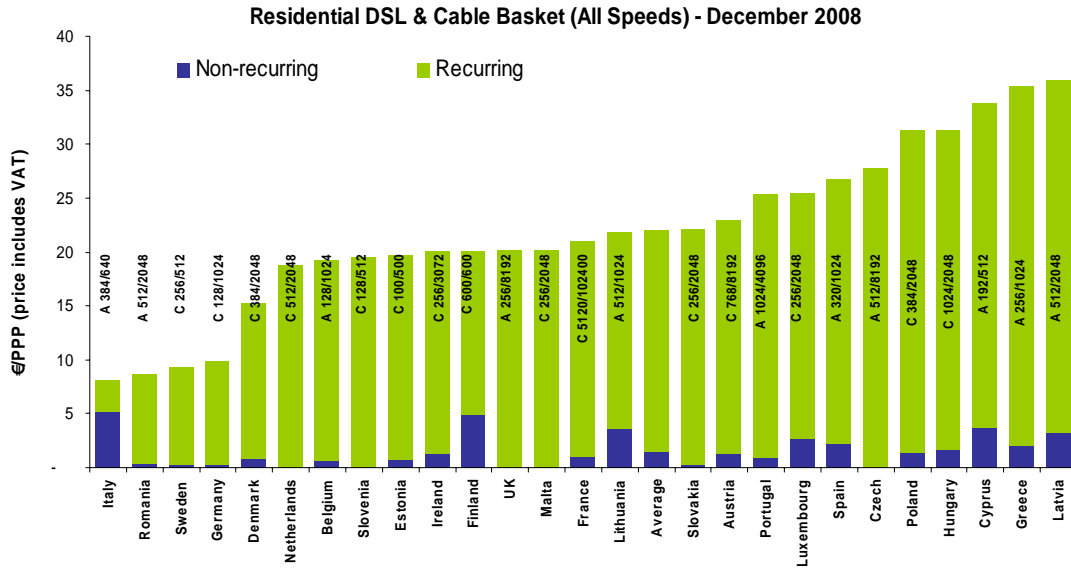
Figure 3.5.1 – Lowest Monthly Rental Residential DSL & Cable Basket (1 – 4 Mbps)



Source: Teligon (A = ADSL, C = Cable)
 Note: Portugal not included as no comparable offer

The lowest monthly residential DSL & cable baskets for all speeds are charted in figure 3.5.2. Ireland ranks in 10th place when the results for this group of 26 European countries are compared. Ireland is six places ahead of the European average. The Irish broadband product benchmarked is the UPC Broadband Value package.

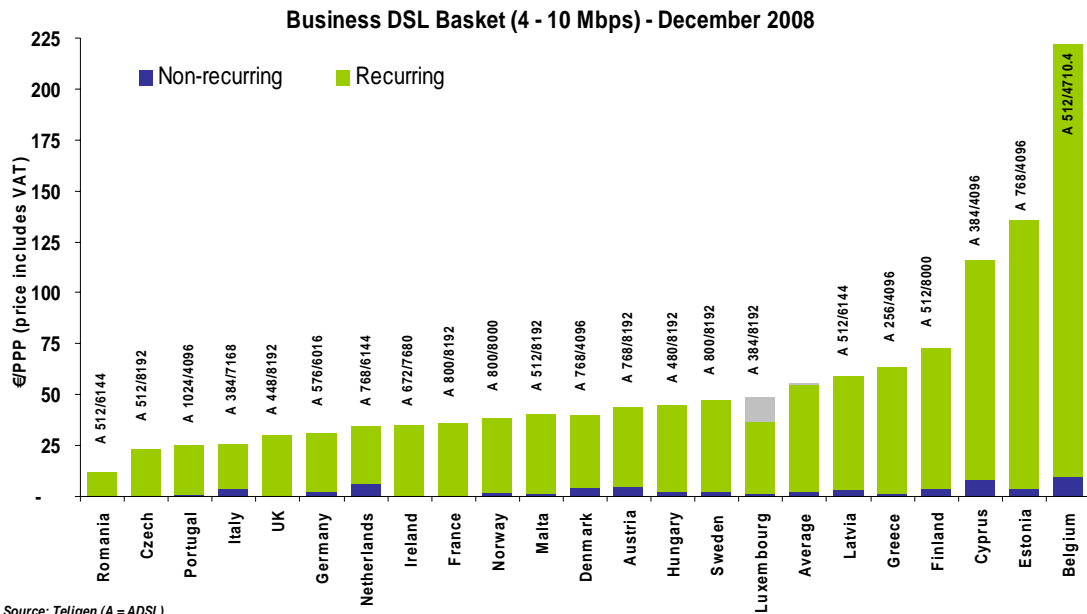
Figure 3.5.2 – Lowest Monthly Rental Residential DSL & Cable Basket (All Speeds)



Source: Teligen (A = ADSL, C = Cable)

The lowest monthly business DSL baskets are charted in figure 3.5.3. Ireland ranks in 8th place when the results are calculated for this group of 22 European countries are compared. Ireland is nine places ahead of the European average.

Figure 3.5.3 – Lowest Monthly Business DSL Basket (4-10Mbps)



Source: Teligen (A = ADSL)

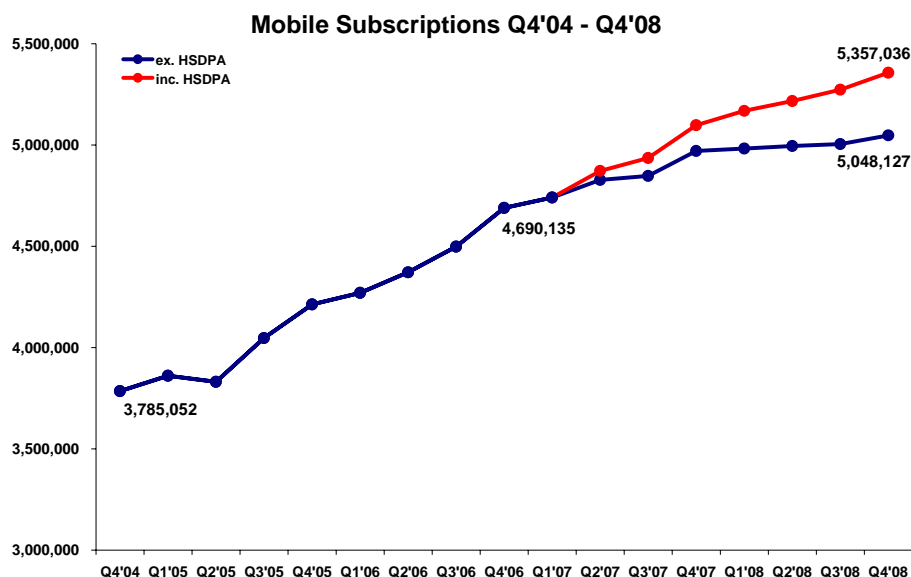
4 Mobile Market Data

4.1 Number of Subscriptions and Penetration Rate

At the end of December 2008 there were 5,357,036 mobile subscriptions in Ireland. HSDPA mobile broadband subscriptions are included in this figure. If HSDPA subscriptions (308,909 this quarter compared to 268,705 in Q3 2008) are excluded, the total number of mobile subscriptions in Ireland was 5,048,127.

Excluding mobile broadband, subscriptions have grown by 0.9% this quarter and by 1.6% since the same period last year. Including mobile broadband, subscriptions have increased by 1.6% this quarter and 5.1% since Q4 2007. A historical plot is provided below in Figure 4.1.1.

Figure 4.1.1 – Mobile Subscriptions



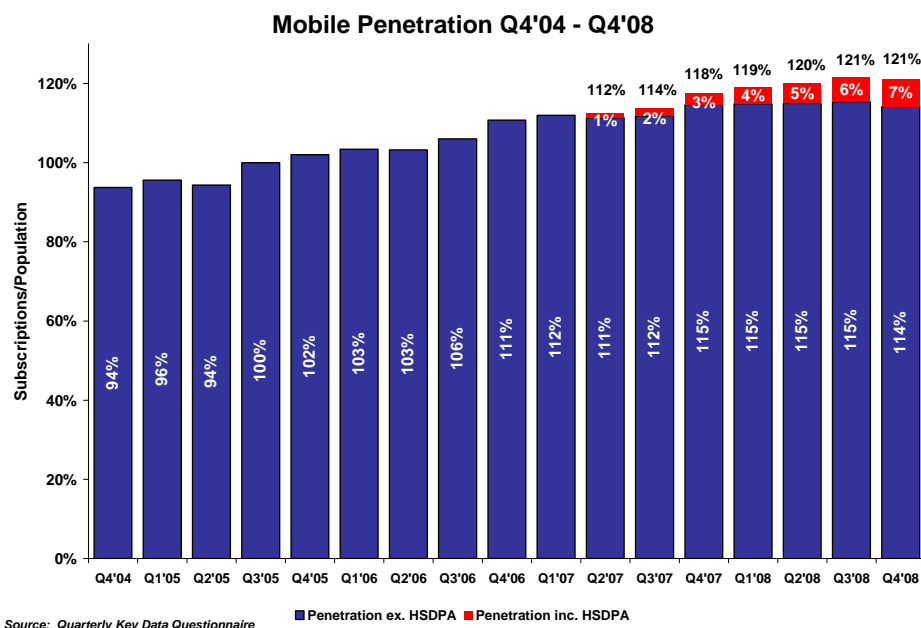
Source: Quarterly Key Data Questionnaire

At the end of December 2008, there were over 5.35 million 2G and 3G mobile subscriptions in Ireland. Figure 4.1.2 illustrates the growth in mobile penetration since Q4 2004 and notes that at the end of December 2008, mobile penetration, based on a population of 4,422,100 (using a CSO April 2008 estimate), was 121.1%²⁵.

Total mobile subscriptions increased by almost 84,000 this quarter, an increase in net additions since Q3 2008 of 29%. Mobile penetration is recognised as the standard metric internationally to measure the adoption of mobile services, and is calculated based on the number of active SIM cards²⁶ 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.

Figure 4.1.2 – Irish Mobile Penetration Rate

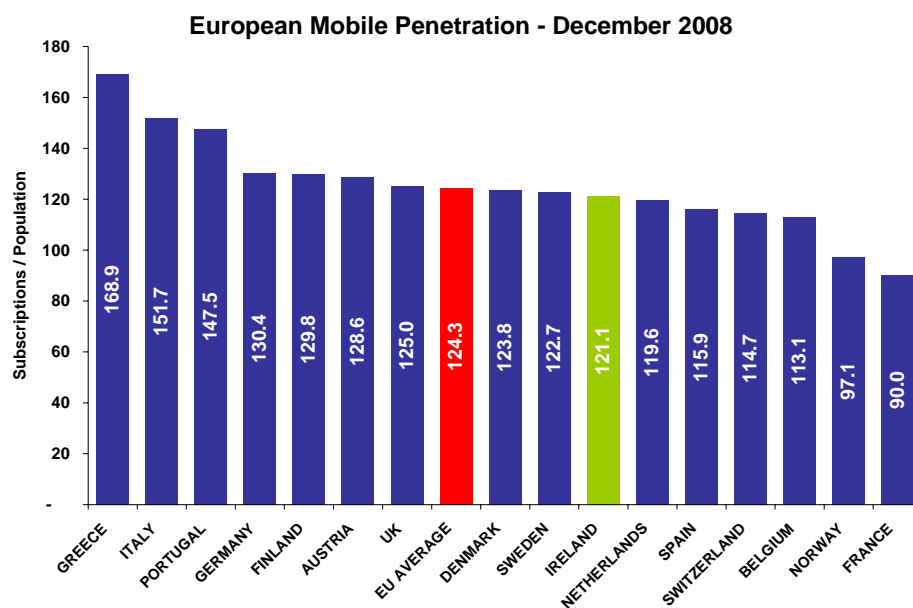


23 Figures since Q2 2007 have been amended in this chart to include HSDPA subscriptions.

26 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 the estimated national mobile penetration rates across sixteen European countries as of December 2008. Ireland (121.1%) is behind the EU average of 124.3%.²⁷ Greece, Italy and Portugal remain the three European countries with the highest mobile penetration while France, according to Yankee Group data, lags some way behind with only 90% penetration.

Figure 4.1.3 – European Mobile Penetration Rates



Source: Yankee Group

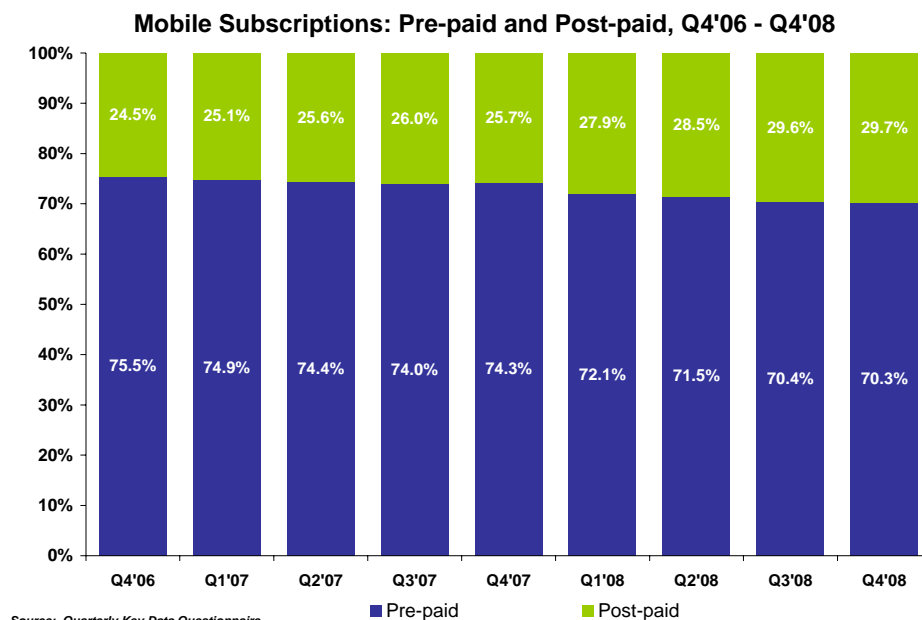
²⁷ Irish data sourced from ComReg includes mobile broadband subscriptions. Not all countries in this chart may include mobile broadband subscriptions.

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 December 2008²⁸.

The pre-paid and 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 has increased by 1.8 percentage points since then. There was a marginal shift towards post-paid subscriptions in Q4 2008.

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



²⁸ 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 Mobile 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 is pre-paid. As of Q4 2008, 70.1% of Vodafone’s subscriptions are pre-paid compared to 70.2% in the previous quarter. The majority of O2 and Meteor’s subscription bases are also pre-paid. O2 has 62.7% pre-paid subscriptions, which is a slight change from the previous quarter (63.1%). Meteor has 87.3% pre-paid subscriptions compared to 87.2% in Q3 2008.

3 Ireland’s subscription base is more evenly split between post-paid and prepaid subscriptions than any of the other operators. 41.4% of its subscriptions are post-paid and 58.6% are pre-paid.

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

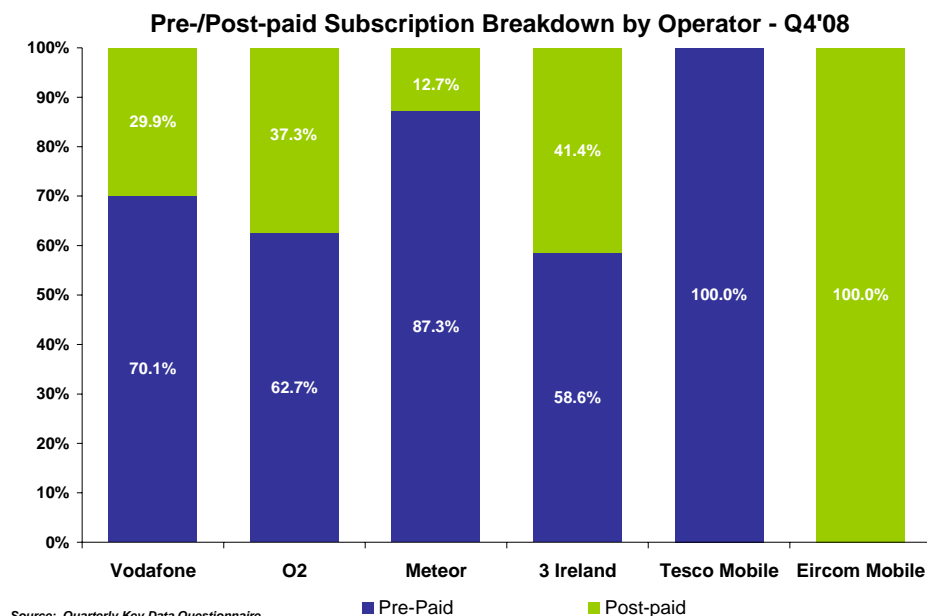
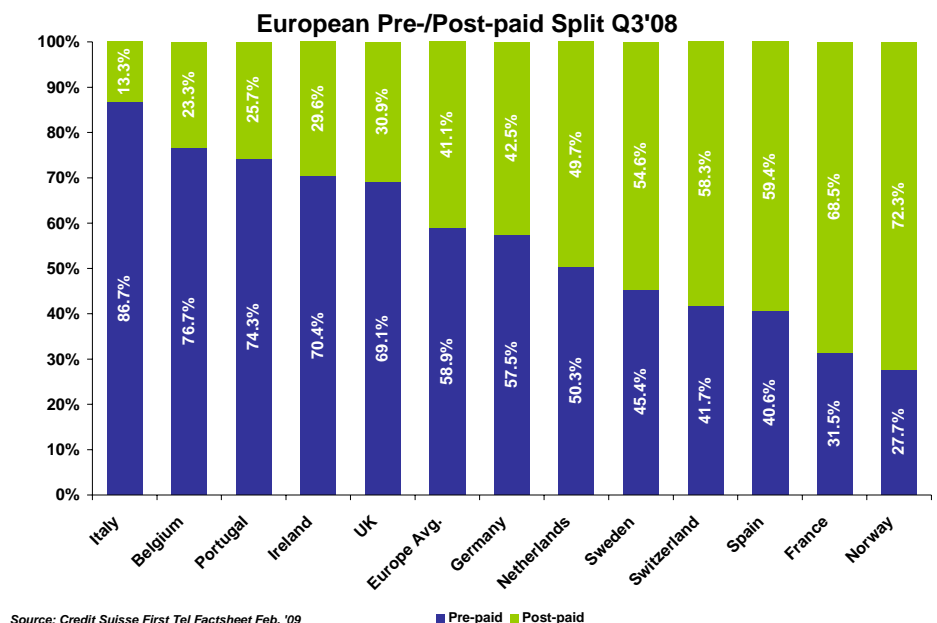


Figure 4.2.3 compares the pre- and post-paid mobile subscription proportions for twelve European countries as of Q3 2008, using Credit Suisse data. Italy has the highest proportion of pre-paid subscriptions of all countries listed.

The European average is approximately 59% pre-paid and 41% post-paid. The proportion of mobile subscriptions in Spain, France and Norway is weighted more towards the post-paid option.

Figure 4.2.3 – Proportion of European Pre-Paid and Post-Paid Subscriptions



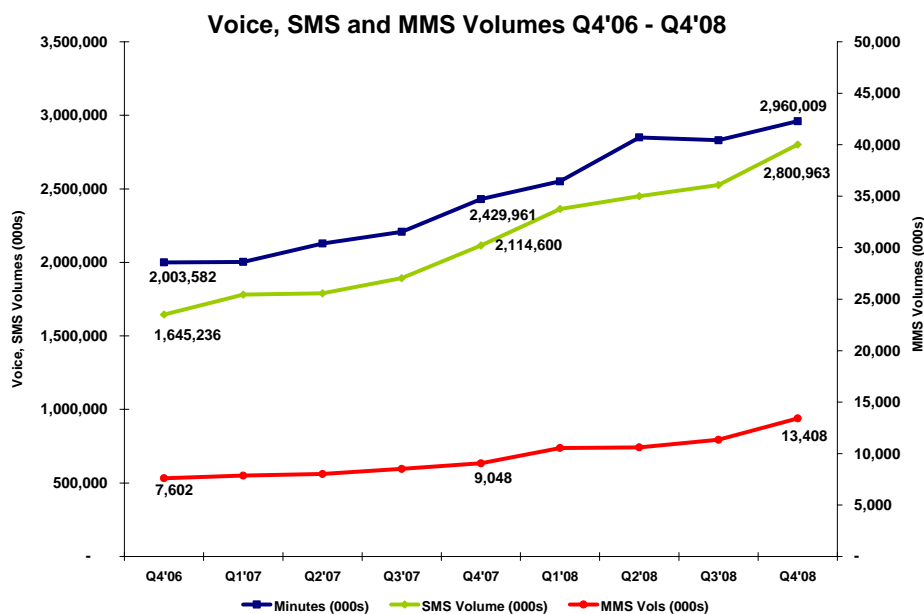
4.3 Mobile Volumes

4.3.1 Total Voice, SMS and MMS Mobile Traffic²⁹

Figure 4.3.1.1 illustrates the growth in voice minutes, SMS, and MMS (Multimedia Messaging Service) messages sent over mobile networks since Q4 2006. Total retail mobile voice traffic totalled almost 3 billion minutes in Q4 2008, compared to 2.8 billion minutes in the previous quarter. This represents an increase of 4.6% in voice volumes since the Q3 2008.

Since Q4 2007 there has been an increase of 21.8% in voice volumes and since the same period in 2006 there was a 48% increase. Mobile originating minutes now account for 57.9% of all voice traffic in the Irish telecommunications markets. The total number of SMS messages sent by mobile users in Ireland totalled 2.8 billion in Q4 2008 compared to 2.5 billion in the previous quarter. SMS messaging grew by 11% quarter on quarter, and volumes of SMS have increased by 32.5% since Q4 2007 and by 70.3% since Q3 2006. If the total volume of text messages is averaged over all active subscriptions, an average of 174 SMS messages were sent per subscription, per month in Q4 2008, compared with 138 in the same period last year. The number of multimedia messages (MMS) sent in the quarter continues to increase. There were just over 13.4 million MMS messages sent during the quarter. This is an increase of 18.3% on the previous quarter.

Figure 4.3.1.1 – SMS, MMS and Call Minute Volumes



²⁹ 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 voice volumes in 2009. SMS volumes include those sent over mobile broadband datacards and usb modems.

4.4 Mobile Revenues

Figure 4.4.1 shows that mobile retail revenues for the quarter were over €504 million. Data revenues were up by 2.3% in this quarter while voice and other revenues grew by 3.1% since Q3 2008. In total, there was an increase of over €14 million in revenues since Q3 2008.

However, year-on-year, voice and other revenues have fallen by 4.9% and total mobile retail revenues have declined by 4.6%. Declining revenues has been the prevailing trend during 2008, thus the increase reported here for Q4 2008 may perhaps be due to the impact of the Christmas period.

Figure 4.4.1 – Total Mobile Retail Revenues

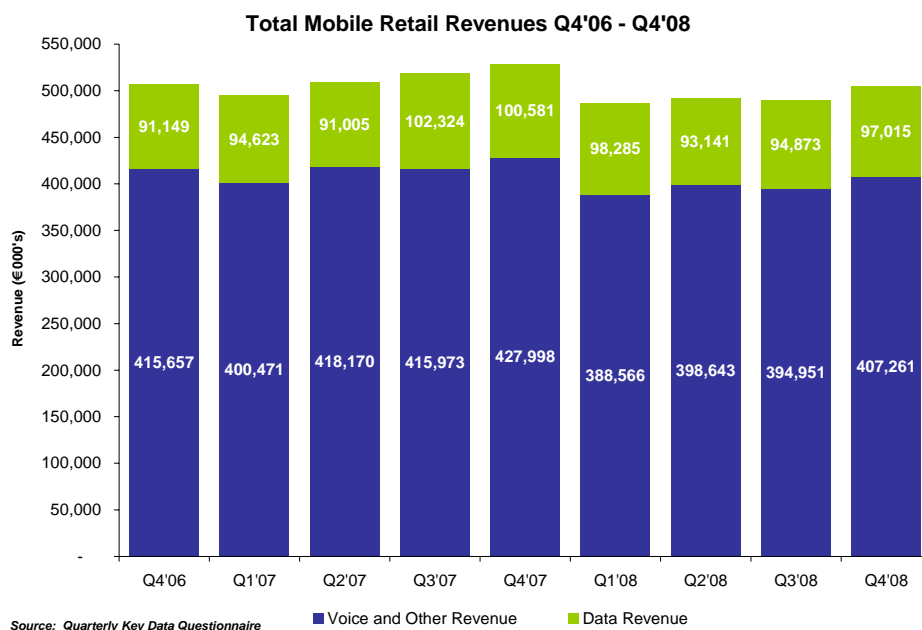
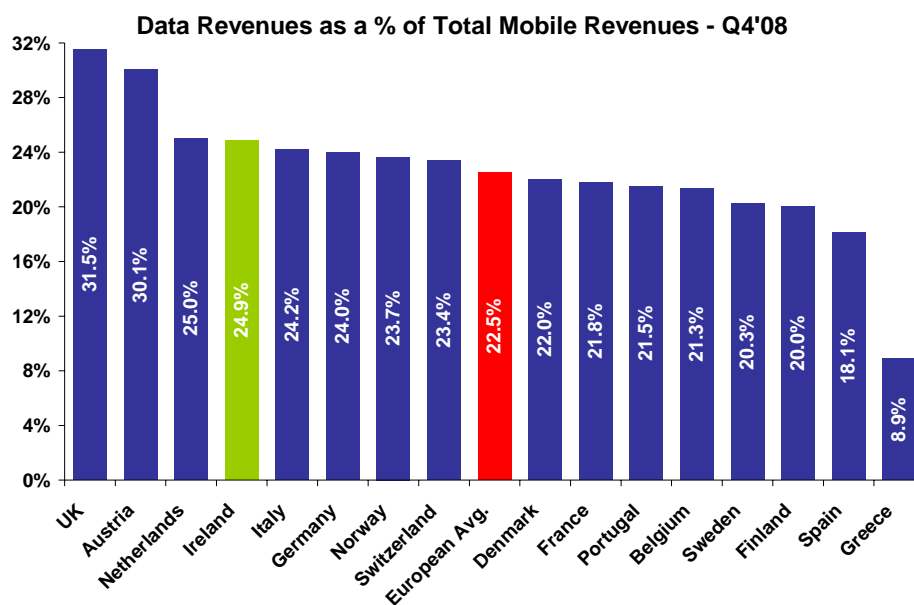


Figure 4.4.2 outlines the percentage of mobile revenues attributable to all data revenues in the Irish market compared to sixteen other European countries. This benchmarking data is calculated independently by Yankee Group, and includes data revenues not only from SMS and MMS messaging, but also data revenues from GPRS data services and 3G data services.

Irish mobile operators rank fourth (last quarter Ireland was third) in comparison to other European operators in terms of levels of data revenues as a percentage of overall revenues. In Q4 2008, 24.9% of total mobile revenues were contributed by data revenues. This figure has not changed since the last quarter but it represents an increase of approximately 2.8 percentage points since Q4 2007.

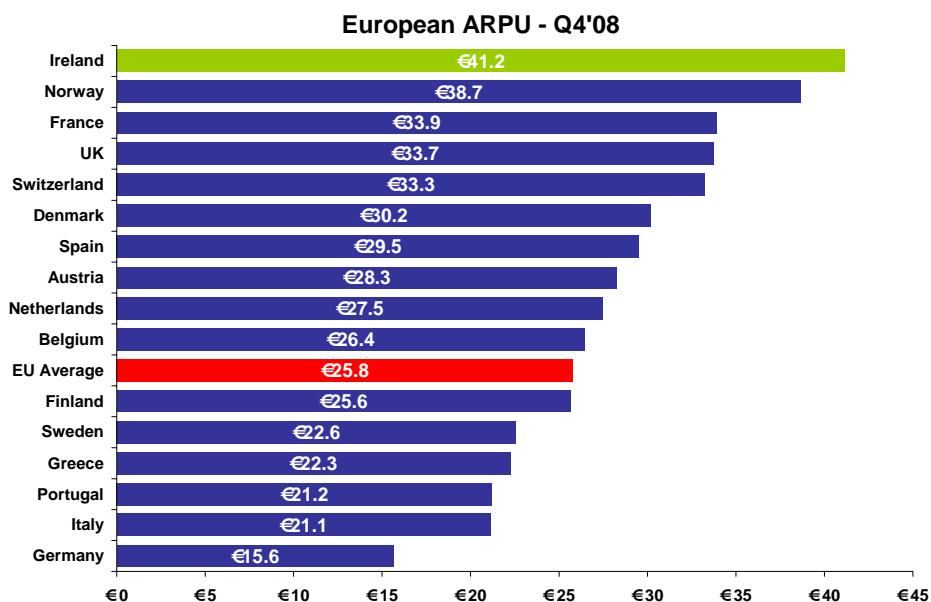
Figure 4.4.2 - Data Revenues as % of Total Mobile Revenue



Source: Yankee Group

Figure 4.4.3 compares ARPU (average revenue per user) across 16 European countries³⁰. Average revenue per user is an indication of average monthly revenue generated by mobile subscriptions in each country. While overall retail mobile revenues obtained from operators include handset sales revenues, the ARPU figures in this report do not incorporate handset sales revenues. Mobile ARPU in Ireland is estimated at €41.2 per month in Q4 2008, a 0.5% drop since Q3 2008 and a 7.2% decrease in ARPU since Q4 2007. The EU average ARPU was €25.8 in Q4 2008 and has fallen over the last year by 4.5%.

Figure 4.4.3 – European Comparison of ARPU



Source: Yankee Group

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.

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 report³¹.

Average minutes of use in Ireland for Q4 2008 were 241 minutes per month, a 0.9% increase on usage since the previous quarter. Minutes of use have declined this quarter in Portugal, Spain, the UK and France while Italy and Germany have seen slight increases similar to Ireland's.

Figure 4.5.1 – Minutes of Use

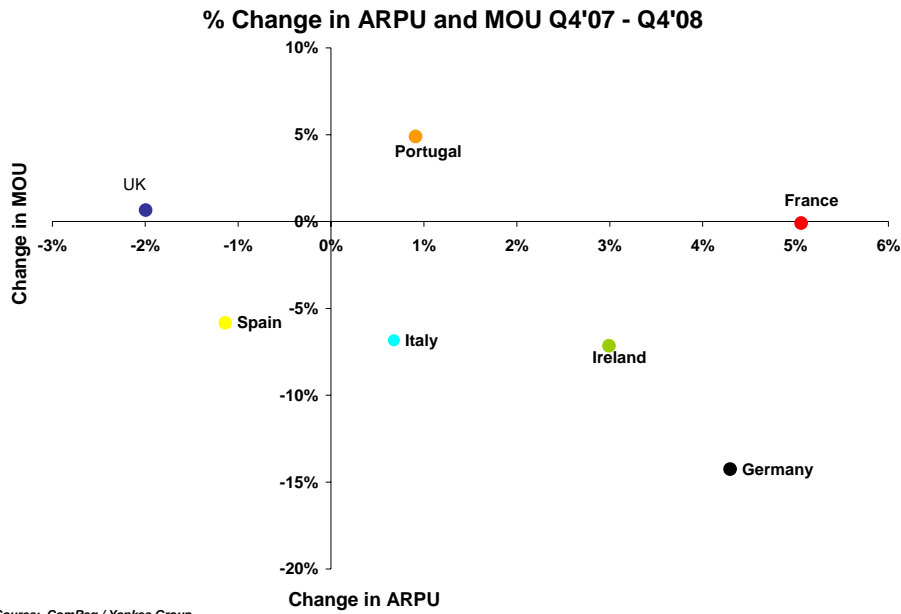
Country	MoU Q4'08	MoU Q3'08	Quarterly Change Q3'08 – Q4'08
France	252	253	-0.3%
Ireland	241	238	+0.9%
UK	167	172	-3.2%
Spain	162	167	-2.7%
Italy	132	132	-
Portugal	119	120	-0.7%
Germany	114	113	+0.3%

31 ComReg Document 09/17a

Figure 4.5.2 plots the annual percentage change in Average Revenue per User (ARPU) against Minutes of Use (MOU) for the seven countries listed in figure 4.5.1³². In France, while ARPU has remained constant over the last year, MOU has increased by approximately 5%.

Irish mobile users have seen ARPU decline by more than 5% while MOU have increased by approximately 3%. Only in the UK have MOU declined while ARPU has increased marginally.

Figure 4.5.2 – Annual Change in European ARPU and MOU



³² Data was only available for Ireland, France, Spain, UK, Germany, Italy, and Portugal.

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, 41.8% if HSDPA is included and 42.4% if HSDPA is excluded, has declined quarter on quarter over the last two years including and excluding mobile broadband. O2's market share, 32.4% if HSDPA is included and 32.7% if HSDPA is excluded, has also declined since Q3 2006 though its market share did pick up slightly in Q2 and Q3 2008. However, this quarter O2's market share has dropped slightly again.

3 Ireland currently accounts for 6.4% of the total active mobile subscription base in Ireland (including mobile broadband) and 4.4% excluding mobile broadband. Excluding O2 and Vodafone, Meteor and 3 Ireland now account for approximately 25% of the market, including and excluding mobile broadband.

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

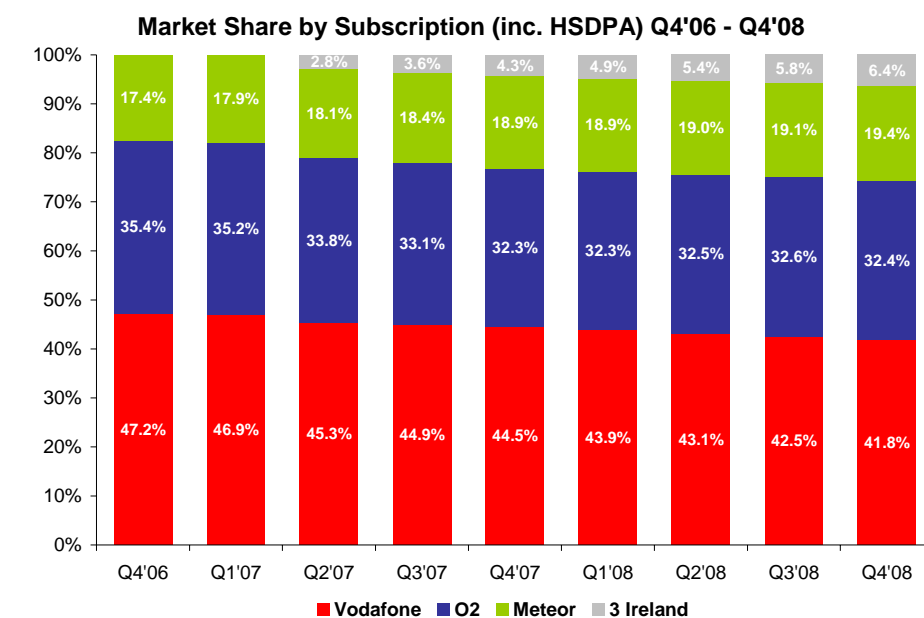


Figure 4.6.1.2 – Market Share – Number of Subscriptions (ex. HSDPA)

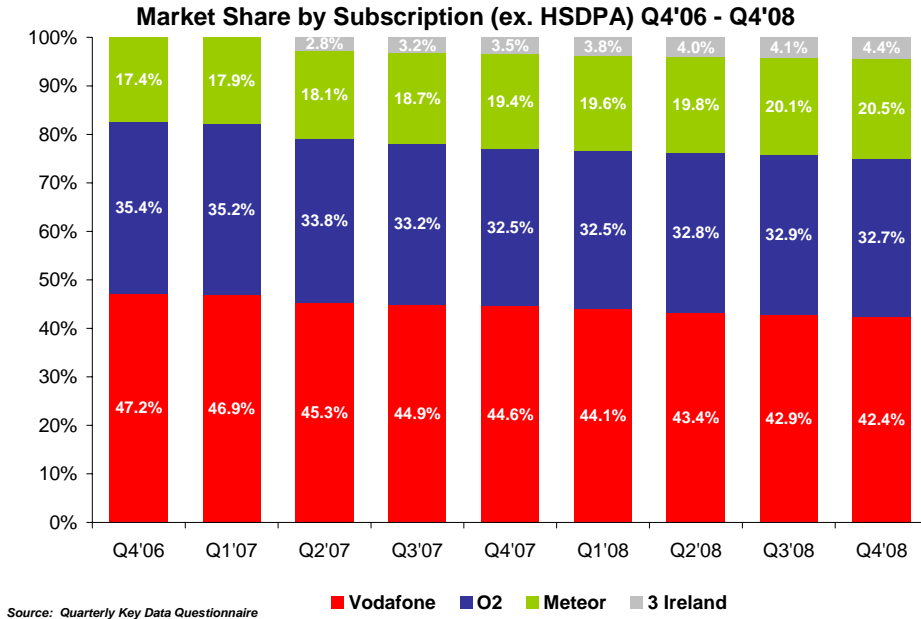
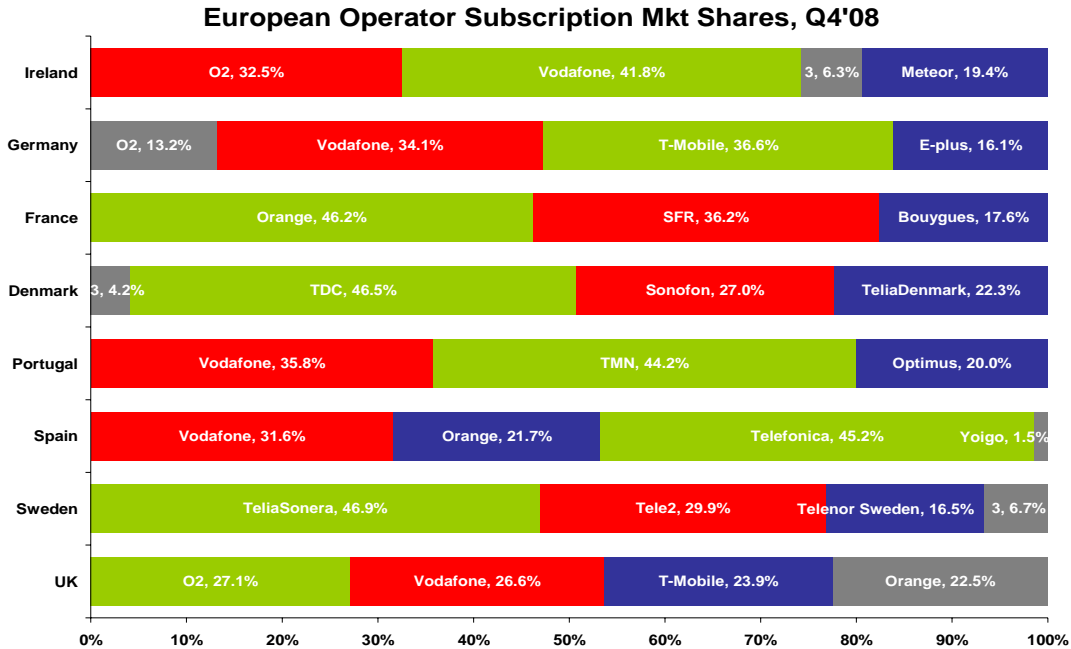


Figure 4.6.1.3 compares the top four operators by market share of subscriptions across eight European countries including Ireland. Those operators with the largest market shares are highlighted green, the second largest highlighted red, third largest blue and fourth in grey. The country with the most equitable share of subscriptions is the UK with the top four operators having a market share of over 20%.

Figure 4.6.1.3 –European Mobile Operators’ Market Share of Subscriptions



Source: Credit Suisse First Tel Factsheet Feb. '09 / Yankee Group

The same eight countries are compared in figure 4.6.1.4, which illustrates the annual percentage change in mobile subscription additions between 2006 and 2008. Ireland has seen strong growth in each of the last three years while the UK and Italy in particular have seen low levels of mobile subscription additions in 2008 particularly.

Figure 4.6.1.4 – European Mobile Net Additions

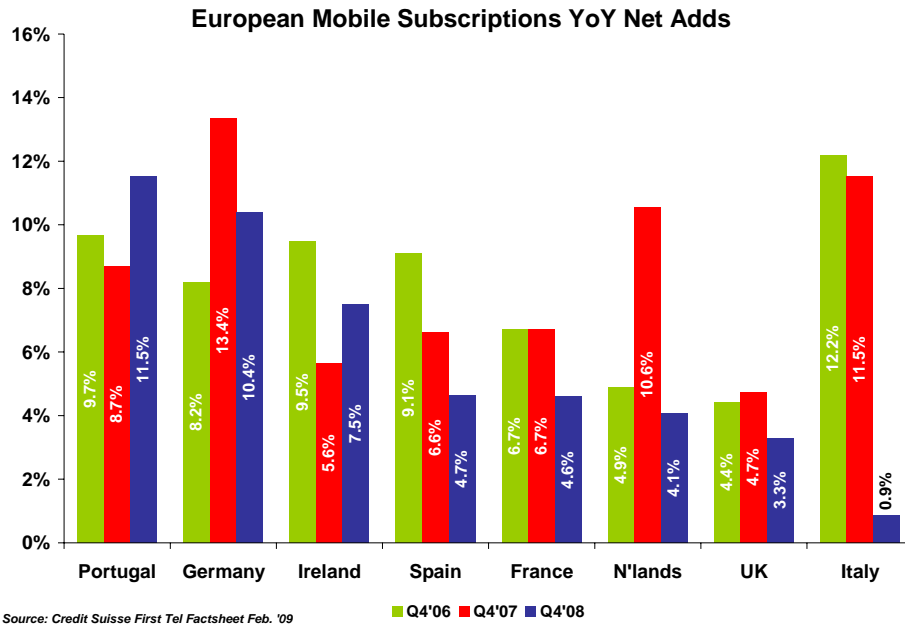
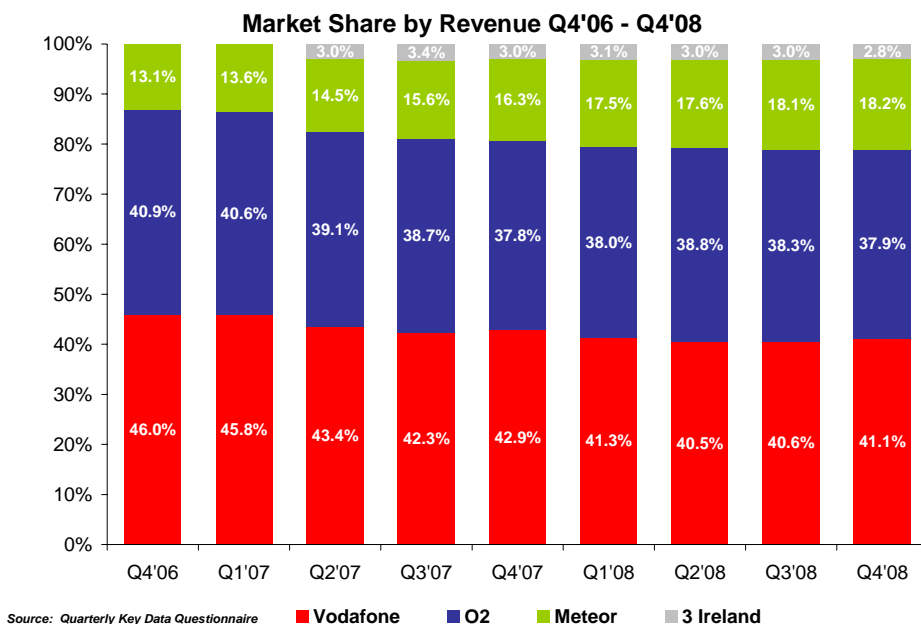


Figure 4.6.1.5 provides an analysis of market shares by revenue for mobile operators in the Irish market. Tesco and Eircom mobile are not included in this chart. 3 Ireland’s market share in terms of revenue declined slightly this quarter and it now accounts for 2.8% of mobile industry retail revenues in Q4 2008.

Meteor’s market share has continued to rise steadily and is now 18.2%. O2’s market share decreased slightly again this quarter, while Vodafone’s market share increased by half of one percentage point in Q4 2008.

Figure 4.6.1.5 – Revenue Market Share

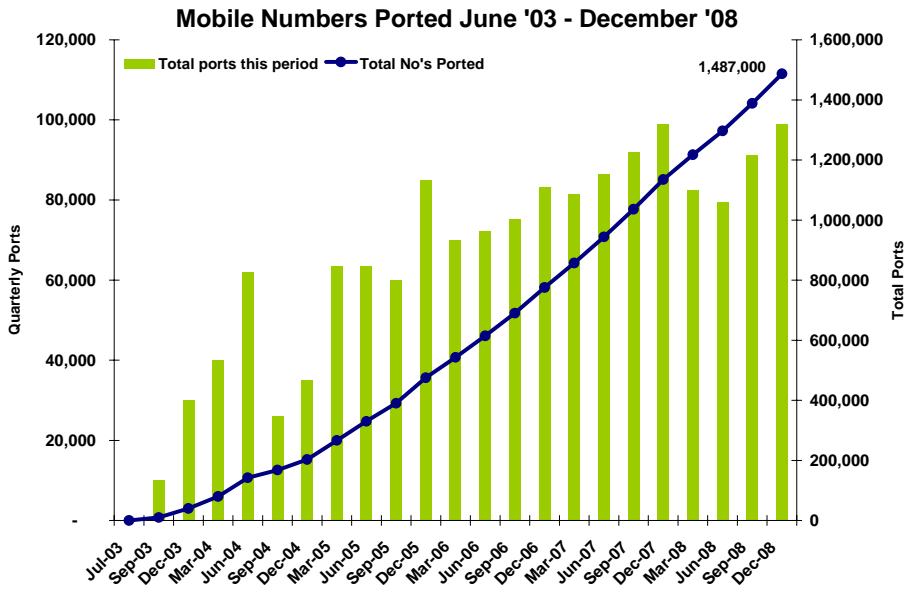


4.6.2 Switching in the Mobile Market

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.

Approximately 1,487,000 people have used MNP to switch operator since June 2003, an increase of 7.1% since Q3 2008. In the quarter to December 2008 almost 99,000 numbers were ported to another operator. Based on data since December 2007, an average of 90,264 numbers has been ported each quarter.

Figure 4.6.2.1 – Cumulative Mobile Numbers Ported



Source: Quarterly Key Data Questionnaire

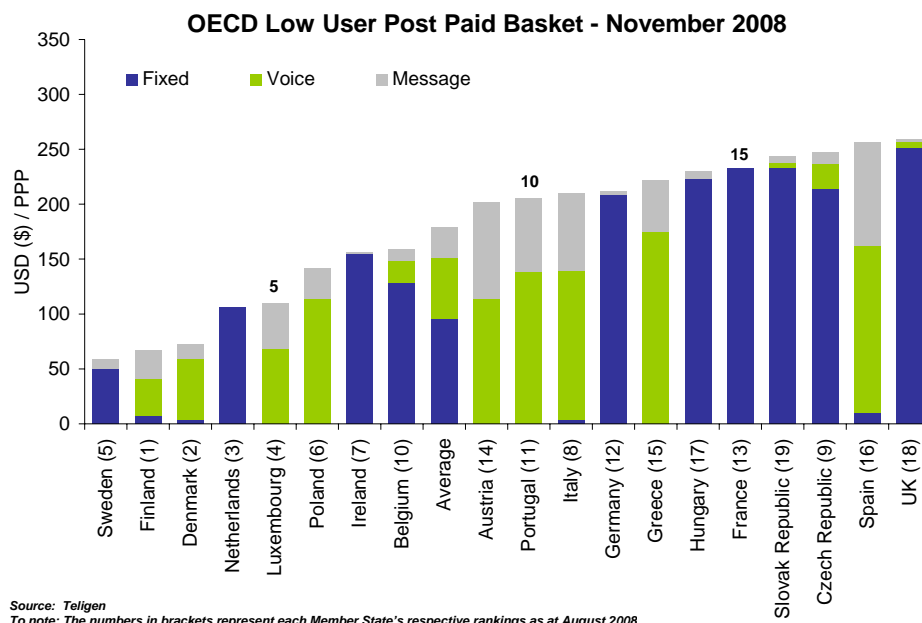
4.7 Mobile Pricing Data³³

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 Basket³⁴

Ireland ranks 7th out of the 19 European countries benchmarked for the low user post-paid basket and remains below the European average for this basket.

Figure 4.7.1.1 - OECD Low User Post Paid Mobile Basket



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

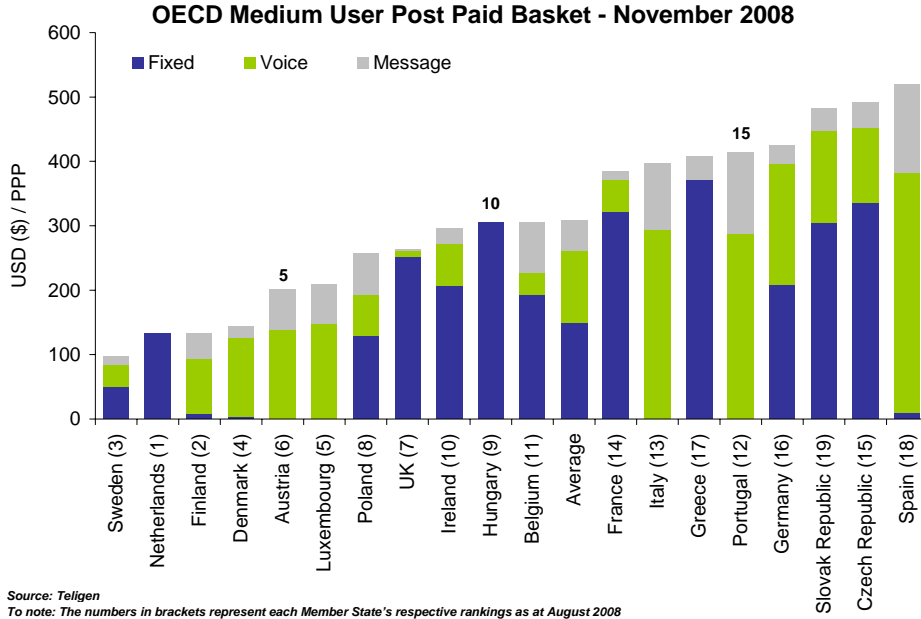
33 The 'Fixed' component of price refers to the standard charges imposed by operators, regardless of the amount of calls made (i.e. connection and rental). Teligen's calculation of this Figure is made up of: Installation Charge/5 + Rental charge for 1 year. The 'Voice' component of price refers to the 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 9th place on this measure, moving up one position since Q3 2008 and three places ahead of the European average.

Figure 4.7.2.1 - OECD Medium User Post Paid Mobile Basket

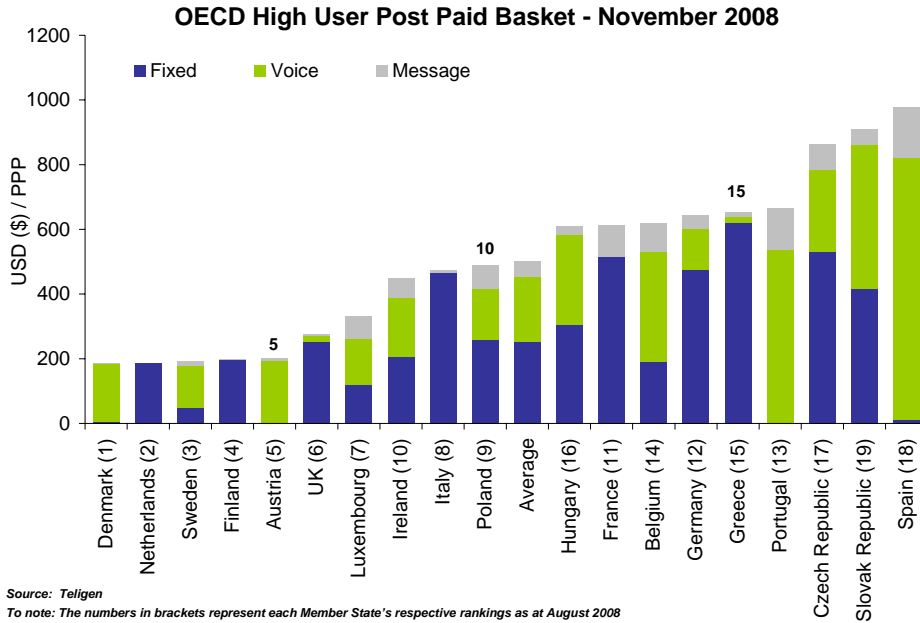


Source: Teligen
 To note: The numbers in brackets represent each Member State's respective rankings as at August 2008

4.7.3 High User Post Paid Mobile Basket

In the High-User Post-Paid basket, Ireland ranks in 8th place among the 19 European countries, having moved one place since the last quarter, and is now three places ahead of the average.

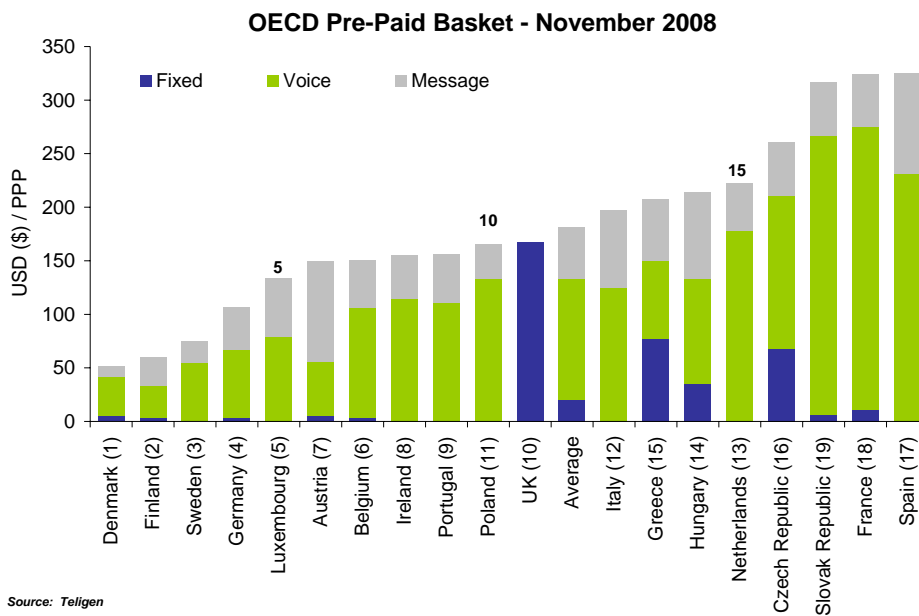
Figure 4.7.3.1 - OECD High User Post Paid Mobile Basket



4.7.4 Pre-Paid Mobile Basket³⁵

For the pre-paid mobile basket, Ireland’s ranking has not changed this quarter, remaining in 8th position among the 19 European countries charted. The cost of this basket in Ireland remains significantly below the EU average.

Figure 4.7.4.1 - OECD Pre-Paid Mobile Basket



Source: Teligon

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

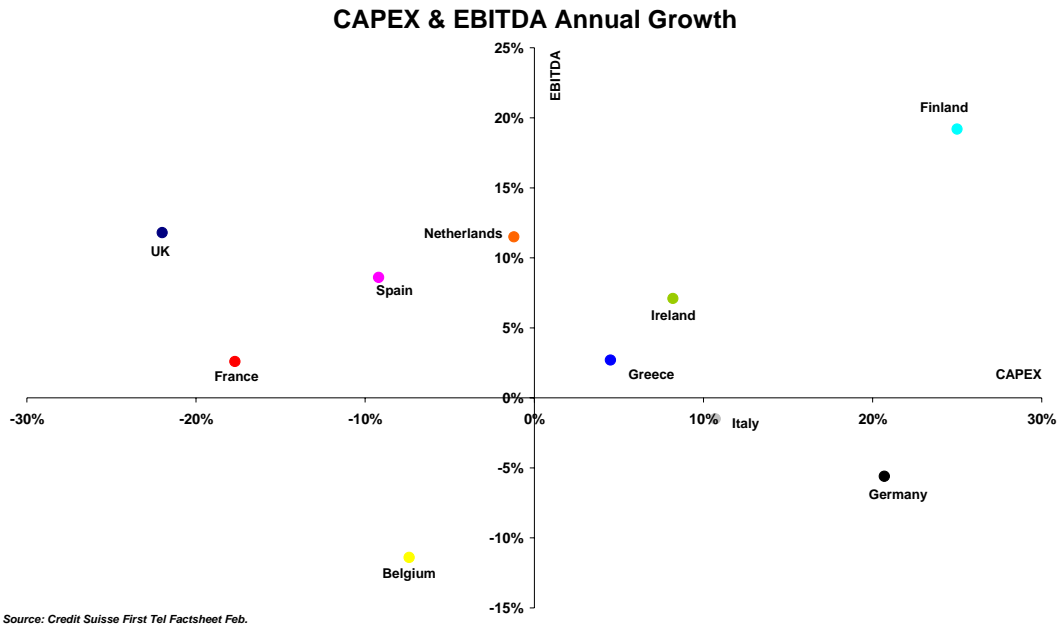
³⁵ The OECD has found that there is little difference between the average pre-paid usage and low-user post-paid usage. Thus, the pre-paid and low user post paid baskets are based on the same usage assumptions.

4.8 Mobile Operators’ Capital Expenditures

Figure 4.8.1 charts the annual growth in capital expenditure (CAPEX) plotted against the annual growth in Earnings Before Interest, Taxation, Depreciation and Amortisation (EBITDA) for mobile operators in ten European countries including Ireland. There is a one year lag on the EBITDA data (Q3 2006 – Q3 2007), while CAPEX growth is captured for Q3 2007 – Q3 2008. This methodology is used in order to analyse how EBITDA trends in the previous year may have influenced operator investment in 2008.

Using Credit Suisse data collected from mobile operators’ accounts, the chart indicates that Irish mobile operators experienced positive EBITDA growth between Q3 2006 and Q3 2007 and in the following year to Q3 2008, CAPEX grew by almost 10% across the Irish operators. Issues affecting mobile operators will differ from country to country but it is noteworthy that CAPEX has declined over the year to Q3 2008 for a number of countries (France, Netherlands, Spain, and UK) which experienced positive EBITDA growth in the preceding year. Global financial conditions may be an explanatory factor here.

Figure 4.8.1 – European Mobile CAPEX and EBITDA



5 Broadcasting

5.1 Overall Broadcasting Market

The broadcasting analysis provided in this report uses operator data in conjunction with CSO estimates³⁶ 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-Air³⁷ 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 December 2008 there were 521,764 subscriptions to cable³⁸/MMDS³⁹ television services in Ireland. For the same period, ComReg estimates that BSKyB had 573,000 Irish satellite⁴⁰ TV subscriptions, a growth of 10,000 subscriptions on the previous quarter and 38,000 since the same reporting period last year. The total number of pay TV households in Ireland (cable, MMDS and satellite) is 1.094 million.⁴¹ Pay-TV households now represent 75% of all homes with a television.

Figure 5.1.1 – Broadcasting Subscriptions and Growth Rates by Platform

Platform	No of Subscriptions Q4'08	Quarterly Change Q3 '08 – Q4'08	Annual Change Q4'07 – Q4'08
Analogue Cable	210,082	-5.1%	-13.9%
Digital Cable	222,749	+3.0%	+3.9%
MMDS	88,933	-4.2%	-15.5%
Satellite	573,000	+2.0%	+7.1%
Total-Pay-TV H'holds	1,094,764	+0.2%	-0.3%
Free-to-View	363,536	-0.6%	+1.0%
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.

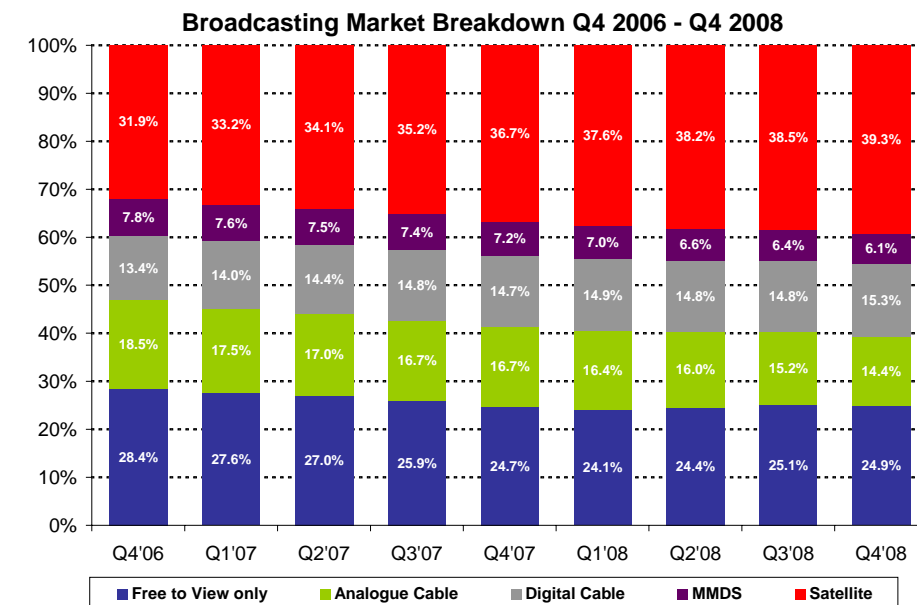
39 MMDS (Multichannel Multipoint Distribution Service) is a wireless telecommunications technology, used as an alternative method of cable television programming reception. MMDS is usually used in sparsely populated rural areas, where laying cables is not economically viable.

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

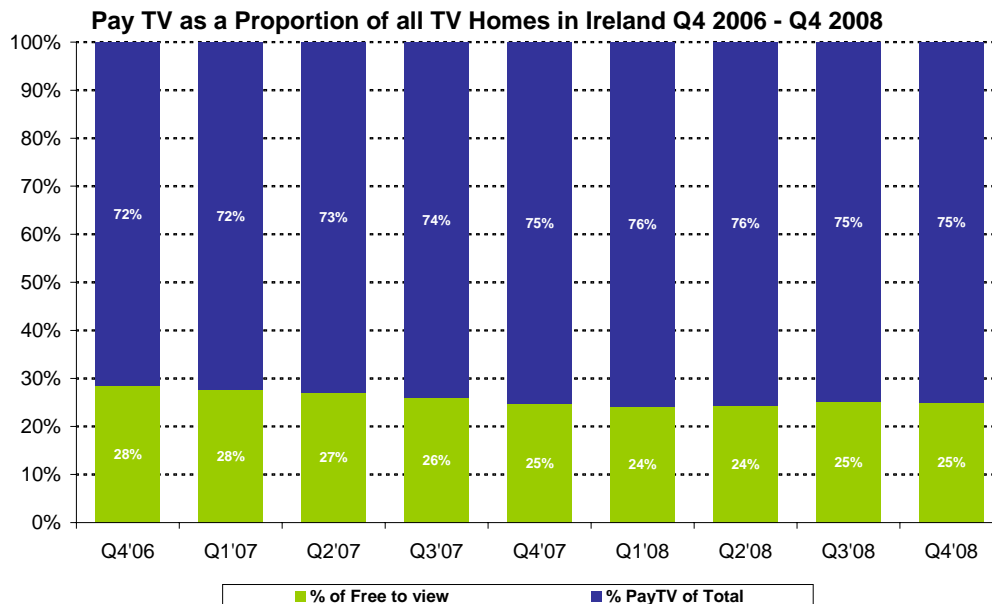


Source: Quarterly Key Data Questionnaire, BSkyB

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 TV viewers in Ireland. In Q4 2008 80.4% of all those subscribing to a paid television service in Ireland had a digital subscription. Although total pay-TV subscriptions increased by 0.2% in Q4 2008, since Q4 2007 total pay-TV subscriptions in Ireland have fallen by 0.3%.

Figure 5.2.1 - Pay TV Market (Analogue and Digital)



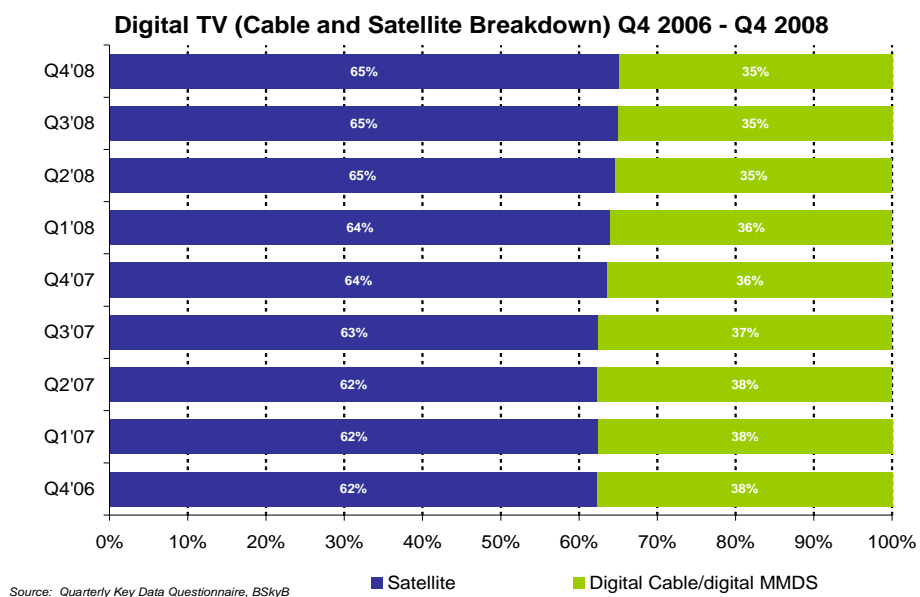
Source: Quarterly Key Data Questionnaire, BSKyB

5.3 Digital TV

At the end of December 2008, there were 879,891 digital TV subscriptions which include cable/MMDS and satellite customers. This represents an increase of 1.7% since Q3 2008. Just over 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). The proportion of digital cable/MMDS subscriptions has decreased slightly over the last two years while the proportion of satellite subscriptions has been increasing.

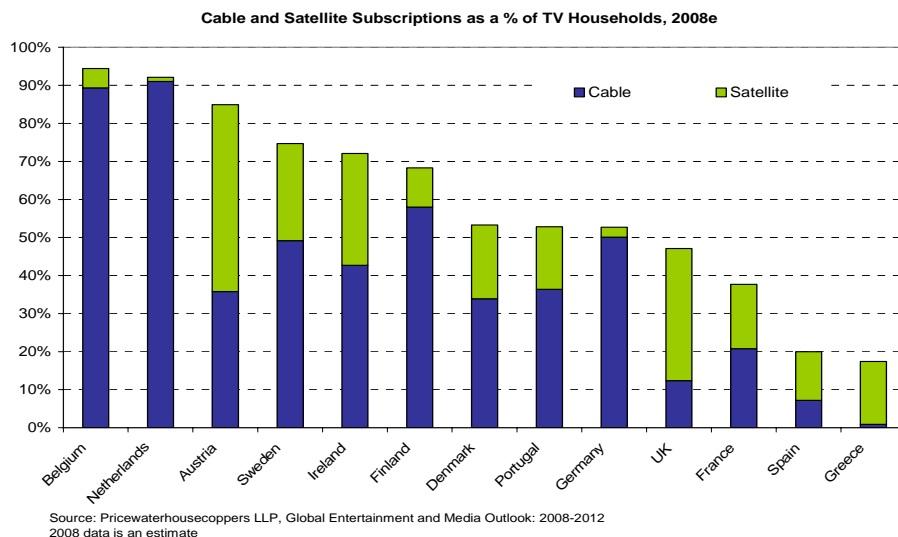
Figure 5.3.1 - Digital TV (Cable and Satellite Breakdown)



5.4 International Cable and Satellite Subscriptions

Figure 5.4.1 presents an estimate by PriceWaterhouseCoopers of the proportion of cable and satellite subscriptions as a percentage of TV households in EU15 countries (minus Luxembourg and Italy) in 2008⁴². According to this data, in most countries (except Austria, UK, Spain, Greece), cable is more prevalent than satellite in terms of estimated subscriptions, particularly so in Belgium and the Netherlands.

Figure 5.4.1 – EU15 Cable and Satellite Subscriptions, 2008e



42 The data is sourced from Pricewaterhouse Coopers' Global Entertainment and Media Outlook: 2008-2012 (9th annual edition). Its should be noted that his data is an estimate and MMDS is not included in the analysis.

6 Emerging Trends

6.1 Fixed Mobile Convergence

Telecommunications service provision is constantly evolving. While the phrase convergence has been bandied around for some time in the telecoms industry, the process of convergence in more recent times has increasingly gathered momentum on networks (e.g. Vodafone Ireland and Perlico), devices (e.g. iPhone) and via service providers such as Skype's provision of voice telephony services over IP.

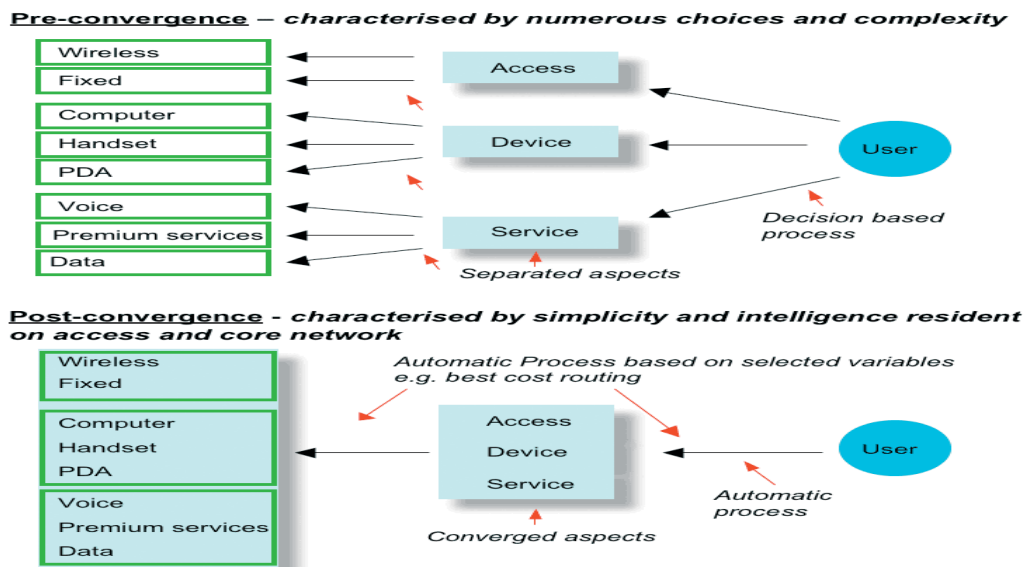
The focus in this Emerging Trends piece is on fixed mobile convergence (FMC) mainly from a network perspective. ComReg previously wrote about fixed mobile convergence in the September 2005 Quarterly Report so it is pertinent to revisit the topic in light of recent FMC activity such as the partnership between Vodafone Ireland and Perlico.

What does FMC mean? The following definition is provided by Informa Telecoms and Media⁴³. "FMC is a development of the concept of convergence in the telecommunications sector that covers the coming together of fixed telecommunications, including fixed cellular such as Wi-Fi and pure cellular". As such FMC offers the opportunity for the service provider to provide value added services, lower costs, increase capacity, increase their customer base and enhance customer retention. From a consumer perspective FMC allows for greater service availability irrespective of location, as it offers both fixed telephony when the user is at a fixed location and mobility when they are on the move.

While there has been some increase in FMC activity in the last number of years, FMC still comprises a small part of the telecoms market and Informa forecasts that FMC subscriptions will represent approximately just 5% of total cellular market subscribers by 2013. An FMC subscriber is defined as one that uses voice services over a device that enables seamless call continuity between cellular and fixed wireless networks. A dual-mode device is required that has UMA or IMS functionality⁴⁴. Figure 6.1.1 below is taken from Informa and illustrates the attributes of what FMC should entail.

43 © Informa UK Ltd. 2009. All rights reserved. FMC and Convergence Service Strategies: the evolution of the value proposition, 3rd edition.

44 Dual mode handsets require a mechanism to switch between fixed and mobile networks for seamless call continuity. Operators can move subscribers on to a Wi-Fi network to allow for better reception when in a building. Seamless handover can be implemented by architectures such as Uma (unlicensed mobile access) or IMS (IP multimedia subsystem). UMA technology provides access to GSM and GPRS mobile services over unlicensed spectrum technologies such as Wi-Fi. IMS uses a VoIP implementation based on the wireless standard body (3GPP).

Figure 6.1.1 - FMC's Defining Attributes⁴⁵

At a geographic level, and particularly in developing economies, customers are bypassing or dispensing with legacy fixed technologies and going directly to mobile. This therefore, also drives the need for fixed operators to provide FMC. In developed markets on the other hand, the sheer number of mobile subscribers acts as a draw for fixed operators. For mobile operators, the need to increase revenues provides the impetus to offer FMC services by increasing customer numbers and providing additional services to existing customers, thus enhancing revenue opportunities⁴⁶.

Mobile operators are driven towards provision of fixed line access provision as mobile networks face increasing bandwidth demand due to substantial increases in the take up of mobile data services⁴⁷, and increasing consumer adoption of bundled service packages, some of which are reducing revenue margins. By amalgamating mobile services with fixed line services, greater economies of scale provide greater opportunities for operators to drive their revenues, subscriber base and brand recognition. For example, Vodafone Ireland acquired the fixed line telecoms firm Perlico in late 2007 and has just recently launched a new fixed offering to business customers called Vodafone Office complementing Vodafone's launch in 2008 of a fixed offer to residential customers called Vodafone at Home.

For fixed operators FMC is a way to gain access to a large pool of mobile subscribers. Operators can use a number of different routes entry into the fixed/mobile market such as

⁴⁵ ©Informa UK Ltd. 2009. All rights reserved. Profiles, FMC: Market Status, 28/07/2008, all rights reserved.

⁴⁶ ©Informa UK Ltd. 2009. All rights reserved. FMC and Convergence Service Strategies: the evolution of the value proposition, 3rd edition, 2009.

⁴⁷ A recent survey conducted by Nielsen on behalf of Tellabs of 50,000 mobile users, revealed that more than half of mobile data users in the US and five large Western European countries expect to increase usage in the next two years and more than a quarter of those who do not use mobile data services intend to start using them soon. Tellabs press release 15/02/09 www.tellabs.com

acquisitions or through joint ventures such as MVNO arrangements⁴⁸. One such example is BT UK's MVNO partnership with Vodafone. Cable operators are also following this pattern through MVNO arrangements, introducing additional bundled quad-play services to help reduce churn in the market⁴⁹. For example, Belgian cable operator Telenet recently extended a partnership with Mobistar and will, under the terms of the deal become a full MVNO to expand its presence in the mobile sector.

Companies in other industries also see FMC as a way to extend their customer base and brand recognition. Over the last number of years retail chains such as Tesco and Ikea have entered the telecoms market to extend and strengthen their customer base.

Typically these entrants have a virtual relationship with operators. In this virtual model, the operator does not own its network but leases capacity from international carriers and local access providers. However, Ovum suggests⁵⁰ that there may be a new direction for the virtual provider. In the HVNO (hybrid virtual network operator) model the operator does own some network infrastructure but combines this with leased network elements from a third-party operator.

So, what does the future hold? One catalyst that could spur greater momentum in the area is the transition to IP technology. As more telecoms customers move away from traditional circuit-based applications towards IP, greater levels of integration of technologies will take place which in turn will support greater provision of fully converged services. The move to IP combined with a trend towards increased bundling; greater competition from non-traditional service providers, and the need to develop greater revenue-generating opportunities in a more challenging economic environment suggest that FMC has strong potential, in spite of relatively little commercial activity to date.

48 A Mobile Virtual Network Operator (MVNO) is a mobile operator that does not own its own spectrum and usually does not have its own network infrastructure. Instead, MVNO's have business arrangements with traditional mobile operators to buy minutes of use for sale to their own customers.

49 A quadruple (or quad) play is a term used for describing a combined service of broadband internet access, television and telephone with wireless service provisions by organisations that traditionally only offered one or two of these services.

50 Ovum, Indian Operators Embrace the Global HVNO Brand, Straight Talk Telecoms Daily, January 2009.