



Commission for  
**Communications Regulation**

## **Irish Communications Market**

### **Quarterly Key Data Report**

**December 2006**

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## Contents

<b>1</b>	<b>OVERALL MARKET DATA</b>	<b>4</b>
1.1	Number of Authorisations	4
1.2	Overall Electronic Communications Revenues	5
1.3	Overall Call Volumes	6
1.4	Pricing Overview	7
1.4.1	PSTN Baskets	7
1.4.2	Mobile Baskets	8
<b>2</b>	<b>FIXED MARKET DATA</b>	<b>9</b>
2.1	Total Fixed Line Revenues	9
2.1.1	Authorised Operators' Share of Overall Fixed Line Revenues	10
2.2	Fixed Line Access	11
2.2.1	Access Paths	11
2.2.2	Indirect Access Lines	12
2.3	Fixed Voice Call Volumes	13
2.4	Fixed Pricing Data	14
2.4.1	PSTN Baskets	14
2.4.2	International Residential Basket	16
2.4.3	International Business Basket	16
2.5	Provision of Internet Services	17
2.6	Provision of DSL Access	19
2.7	Provision of Broadband Services	20
2.8	ADSL Pricing Data	23
<b>3</b>	<b>MOBILE MARKET DATA</b>	<b>26</b>
3.1	Number of Subscribers and Penetration Rate	26
3.1.1	Irish Mobile Penetration Rate	26
3.1.2	European Mobile Penetration Rates	26
3.1.3	Subscribers Pre-Paid / Post-Paid Comparison	27
3.2	Market Shares	28
3.3	Competitive Activity in the Mobile Market	30
3.4	Mobile Volumes	30
3.5	Mobile Revenues	31
3.5.1	Mobile Revenues by Voice and Data	31
3.6	Mobile Pricing Data	33
3.6.1	Low User Post Paid Mobile Basket	34
3.6.2	Medium User Post Paid Mobile Basket	34
3.6.3	High User Post Paid Mobile Basket	35
3.6.4	Pre-Paid Mobile Basket	35
<b>4</b>	<b>BROADCASTING</b>	<b>36</b>
4.1	Cable/MMDS & Satellite	36
<b>5</b>	<b>EMERGING TRENDS- FUTURE BROADBAND APPLICATIONS</b>	<b>39</b>
5.1	Current use of the Internet and Broadband in Ireland	39
5.2	Delivering Increasingly Fast Broadband	40
5.3	What Services will be Available in the Broadband Home?	41

## Table of Figures

Figure 1.1.1 - Total Number of Authorisations .....	4
Figure 1.2.1 – Fixed, Mobile & Broadcasting as a % of Total Revenues .....	5
Figure 1.3.1 - Share of Total Voice Call Volumes (Minutes) .....	6
Figure 1.4.1 – Ireland’s Position in Various PSTN Baskets.....	8
Figure 1.4.2 – Ireland’s Position in Various Mobile Baskets .....	8
Figure 2.1.1 – Fixed Line Revenues.....	9
Figure 2.1.2 - Market Share of fixed line revenues .....	10
Figure 2.1.3 – Revenue Market Share for Top 5 OAOs and all other market operators .....	11
Figure 2.2.1 - Fixed Access Paths .....	12
Figure 2.2.2 - Indirect Access Lines .....	13
Figure 2.3.1 – Fixed Voice Call Volume .....	14
Figure 2.4.1.1 - OECD National Residential Basket – August 2006 .....	15
Figure 2.4.1.2 - OECD National Business Basket – August 2006 .....	15
Figure 2.4.1.3 - OECD International Residential Basket – August 2006.....	16
Figure 2.4.1.4 - OECD International Business Basket – August 2006.....	16
Figure 2.5.1 – Number of Copper Based Internet Subscribers .....	17
Figure 2.5.2 – Profile of Internet Subscribers in Ireland .....	18
Figure 2.5.3 – Household Penetration of PCs, Internet and Broadband, 2006 .....	19
Figure 2.6.1 - Provision of DSL Access.....	20
Figure 2.7.1 – Broadband Subscribers and growth rates by Platform.....	21
Figure 2.7.2 – Broadband Subscribers by Platform .....	21
Figure 2.7.3 – Broadband Subscribers by Subscriber Type.....	22
Figure 2.7.4 – Market share of Total Broadband Market .....	22
Figure 2.7.5 – Broadband Penetration Rate .....	23
Figure 2.8.1 – Lowest Monthly Rental ADSL Basket- November 2006 .....	24
Figure 2.8.2 – Lowest Monthly Rental Cable and DSL Basket –November 2006.....	25
Figure 3.1.1 – Irish Mobile Penetration Rate.....	26
Figure 3.1.2 – European Mobile Penetration Rates.....	27
Figure 3.1.3 – Number of Subscribers (Pre-Paid/Post Paid).....	27
Figure 3.1.4 – Number of Subscribers (Pre-Paid/Post Paid) – by Operator .....	28
Figure 3.2.1 – Market Share – Number of Subscribers .....	29
Figure 3.2.2 – Market Share – Revenue.....	29
Figure 3.3.1 – Mobile Numbers Ported.....	30
Figure 3.4.1 – SMS, MMS and Call Minutes.....	31
Figure 3.5.1 - Data Revenues as % of Total Mobile Revenue.....	32
Figure 3.5.2 - European ARPU Compared – Q3 2006 .....	33
Figure 3.6.1 - OECD Low User Post Paid Mobile Basket – August 2006 .....	34
Figure 3.6.2 - OECD Medium User Post Paid Mobile Basket – August 2006.....	34

Figure 3.6.3 - OECD High User Post Paid Mobile Basket – August 2006 .....	35
Figure 3.6.4 - OECD Pre-Paid Mobile Basket – August 2006 .....	35
Figure 4.1.1 - Take Up of Broadcasting Services .....	36
Figure 4.1.2 - Pay TV Market (Analogue and Digital) .....	37
Figure 4.1.3 - Digital TV (Cable and Satellite Breakdown) .....	38
Figure 5.1.1: Range of internet activities performed by home internet users, profiled by internet subscription type. ....	39
Figure 5.2.1: Platforms for delivering very fast broadband and potential download speeds for these technologies. ....	40
Figure 5.3.1: The Broadband Home, Source: Analysys Research, 2004 .....	41
Figure 5.3.2: The Range of Likely Services Delivered over Very Fast Broadband .....	42

**Corrigendum for the September 2006, Quarterly Key Data Report:**

1. pg 34: figure 3.4.1 (number of SMS messages sent in Q2 2006 revised)

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## 1 Overall Market Data

Data presented in this report is based on returns from authorised operators for the period starting 1<sup>st</sup> July to 30<sup>th</sup> September 2006. The report is based on submissions from 62 operators, which represents almost all authorised market activity.

### 1.1 Number of Authorisations

Figure 1.1.1 - Total Number of Authorisations

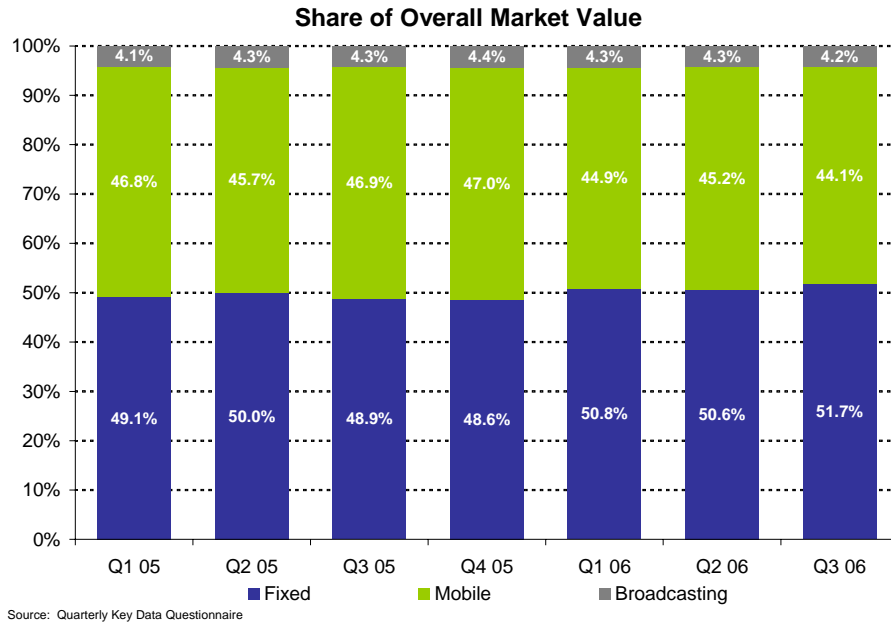
Total Authorisations	Sept 2006
No. of fixed and wireless authorisations	304
No. of mobile telephony authorisations	4
No. of broadcasting authorisations ( incl. Cable TV, MMDS, Deflectors)	49
<b>Total Number</b>	<b>357</b>

Before providing networks or services to third parties, operators are required to submit a notification to ComReg for the purposes of compiling a register of authorised operators. At the date of publication of there were 357 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 reflect the total number of commercially active organisations or entities currently operating in the market. The total number includes a number of undertakings who are authorised to use license-exempt spectrum for the provision of services.

The drop in the number of reported authorised operators since the June 2006 report is due to an internal audit of all operators who have notified ComReg of their intention to provide services to the Irish market. Since the completion of this audit, a number of previously authorised operators who may have withdrawn from the market or re-evaluated plans to commercially launch services have been removed from the list.

## 1.2 Overall Electronic Communications Revenues<sup>1</sup>

Figure 1.2.1 – Fixed, Mobile & Broadcasting as a % of Total Revenues<sup>2</sup>



Overall electronic communications network and service revenues at the end of September 2006 were €1.09bn for the quarter, or approximately €4.35 billion per annum on an annualised basis. Total industry revenue increased by 3% in the quarter, and by 11% on the previous 12 months. The increase in total industry revenue is due to a combination of revenue growth and increased compliance by operators providing data for the QR.

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.

Total revenue in all three industry sectors increased this quarter, with revenue in the fixed line market increasing by 5.2%. In Q3 2006 fixed line revenues accounted for 51.7% of electronic communications revenues, a 1% increase in share of industry revenue since last quarter. An increase in the proportion of electronic communications industry revenue attributable to the fixed line markets is particularly due to increased revenues from wholesale interconnection and increased revenue from broadband services.

<sup>1</sup> For further detail on terms and definitions see ComReg Document Number 06/52a Explanatory Memorandum to Quarterly Key Data Report.

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

### 1.3 Overall Call Volumes

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

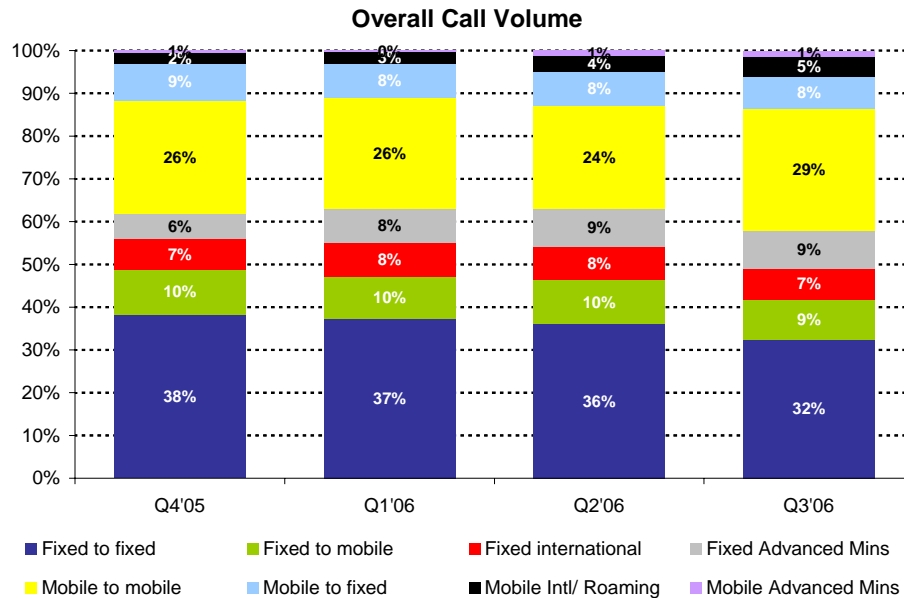


Figure 1.3.1 profiles volumes of voice calls by call type for both fixed and mobile voice on a quarterly basis. ComReg now includes a range of advanced service minutes<sup>3</sup>, and mobile international roaming minutes in this chart, which is a refinement to the previous methodology in profiling fixed and mobile call volumes. Advanced service minutes are calculated for both the fixed line and mobile sectors, based on which network the call was made (i.e. originated) from. This methodology has been modified to ensure that ComReg’s analysis is more inclusive of new services and developments in the fixed and mobile markets. International roaming minutes<sup>4</sup> made by Irish mobile subscribers while roaming on networks abroad are also included in the “Mobile International and Roaming” category. Mobile roaming calls made by visitors while in Ireland are excluded from the analysis.

Total voice minutes in the Irish market totalled 4.26 million minutes, a 4% increase in voice call volumes in the previous quarter when total voice minutes were 4.1 million minutes. The increase in total minutes is as a result of increased volumes in the traffic originating on mobile networks. Total fixed line to fixed line calls make up 32% of all voice traffic, while mobile to mobile traffic accounts for 29% of voice minutes. In total, traffic originating on a fixed line network accounts for 57% of all voice minutes, while mobile originating voice minutes account for the remaining 43%.

<sup>3</sup> Advanced service minutes include minutes to premium rate numbers, freephone numbers, callsave, operator services, VPN minutes and other services. Advanced services are calculated for the fixed and mobile market based on the network which the call was made (i.e. originated) from.

<sup>4</sup> International roaming refers to voice mins for calls made by Irish mobile subscribers while using their mobile phones abroad.

## 1.4 Pricing Overview

This section examines Ireland's current and previous rankings based on prices in various consumer baskets against other EU countries. Data on PSTN<sup>5</sup> and mobile basket prices 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: (i) the construction of one or more baskets of telephone services; (ii) the pricing of those baskets; and (iii) the conversion of the individual currencies to standard units (i.e. US Dollars or euros and Purchasing Power Parities (PPPs)). Countries are then ranked based on PPPs, the least expensive country ranked 1<sup>st</sup>.

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

For further information on Teligen's methodology please see the accompanying memorandum ComReg 06/68a.

### 1.4.1 PSTN Baskets

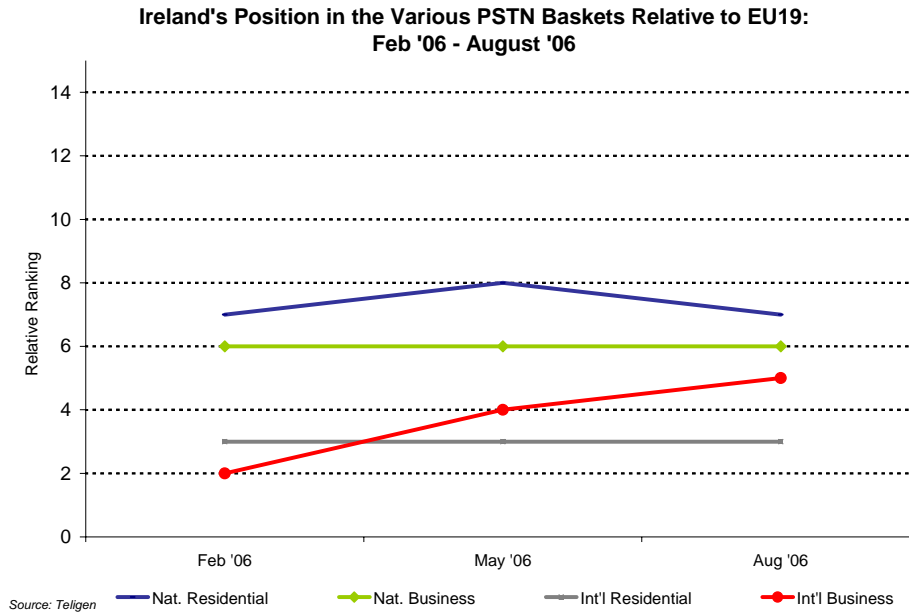
Figure 1.4.1 shows the movement in Ireland's position relative to other EU countries in all PSTN baskets since February 2006. There has been most movement in the International Business Basket where Ireland's position has moved from 2<sup>nd</sup> to 5<sup>th</sup> place in the last two quarters.

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<sup>5</sup> PSTN refers to the copper telecommunications networks of the major operators, on which calls can be made. A PSTN is more commonly known as a copper telephone line.



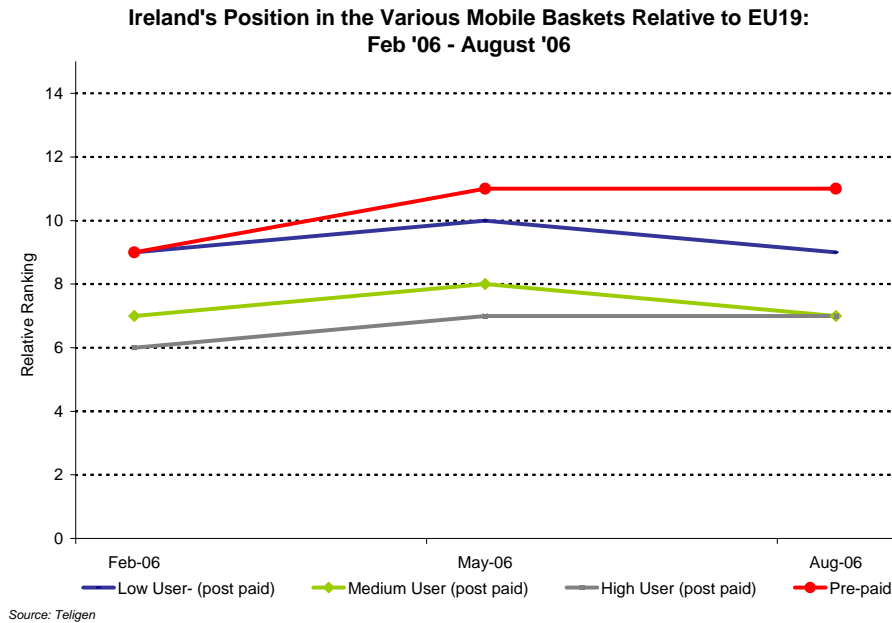
**Figure 1.4.1 – Ireland’s Position in Various PSTN Baskets**



**1.4.2 Mobile Baskets**

Figure 1.4.2 shows the movement in Ireland’s position relative to the EU in all mobile baskets since February 2006. The prepaid mobile basket has seen the most movement in the last two quarters, with Ireland’s position moving from 9<sup>th</sup> to 11<sup>th</sup> since February 2006.

**Figure 1.4.2 – Ireland’s Position in Various Mobile Baskets**

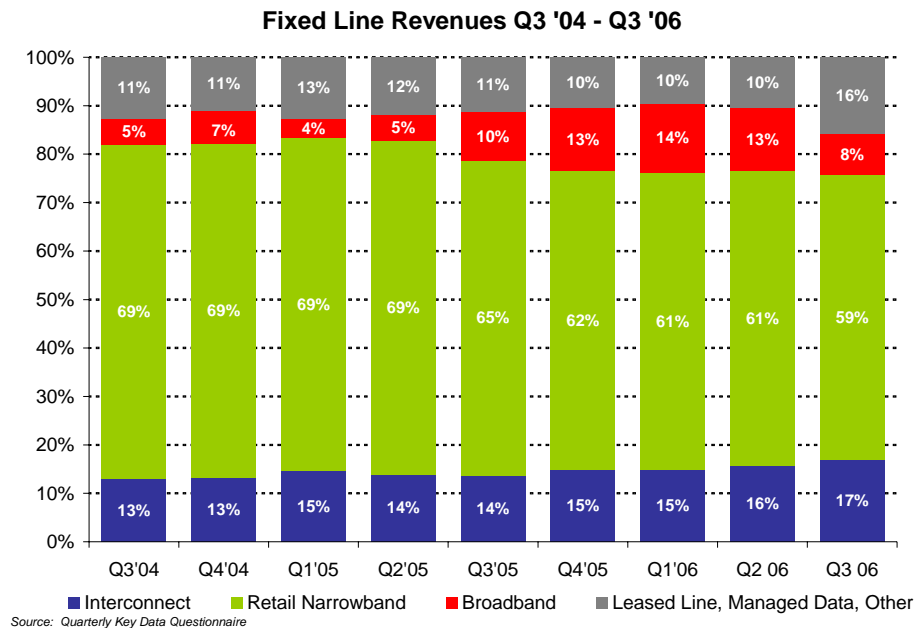


## 2 Fixed Market Data

### 2.1 Total Fixed Line Revenues

Total fixed line revenues are €563 million this quarter, an increase of 5% since last quarter. This quarter, ComReg has redefined the categorisation of revenue categories presented in Figure 2.1.1. Therefore, data presented for Q3 2006 is not directly comparable with previous quarters. The new methodology presents broadband revenues separately, where previously they were calculated in a “Broadband and Other” category. This “Other” category, which includes revenues generated from the sale of telecoms equipment, telephone directories, and a range of other services is now included in the leased line and managed data category.

Figure 2.1.1 – Fixed Line Revenues



2.1.1 Authorised Operators' Share of Overall Fixed Line Revenues

Figure 2.1.2 shows the market shares of the incumbent and other authorised operators (OAOs) in each of the fixed line service categories in Figure 2.1.1. Market shares are grouped within a number of revenue categories to link related services; however this classification does not reflect the specific markets identified in ComReg's recent Market Review process. Market share data presented here reflects the changes made this quarter to categorised revenues as outlined in Figure 2.1.1. *eircom* retains the largest share of the revenue market share in each of the revenue streams; however *eircom*'s overall share of fixed line market revenue has decreased again this quarter from 74% in Q2 2006 to 72% in Q3 2006. This is likely to be due to both increased OAO activity in the market, and an increase in compliance to the Quarterly Report questionnaire by operators in the market.

**Figure 2.1.2 - Market Share of fixed line revenues**

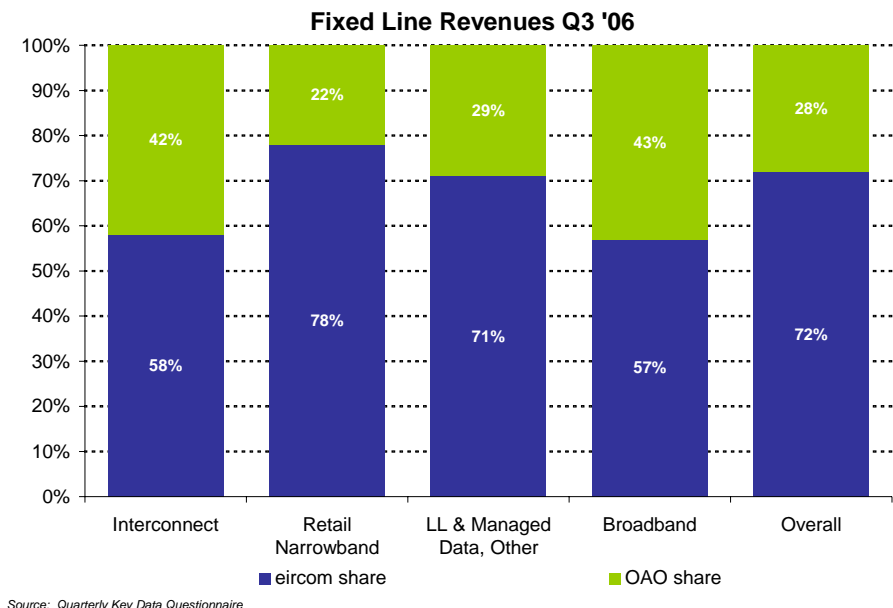
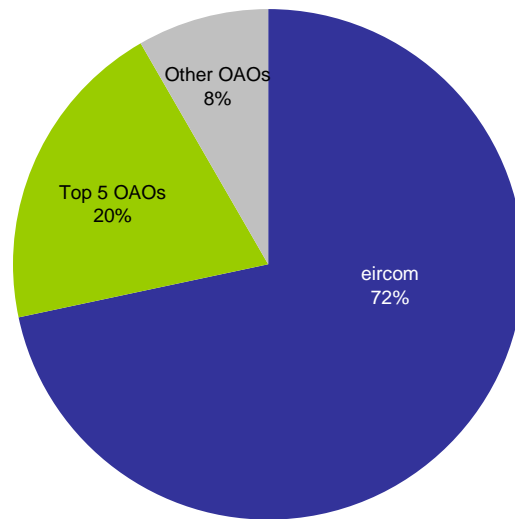


Figure 2.1.3 is a new chart which outlines revenue market share in the market for Q3 2006 comparing incumbent market share with the top 5 revenue OAOs, and all other OAOs with respect to fixed line revenue. After *eircom*, the largest revenue earning operator in the market, with 72% market share, the next five largest operators in terms of revenue contribute a further 20% of industry revenue, with the remaining 8% generated by all other operators in the fixed line market. This chart is presented here as additional analysis of the fixed market and should not be interpreted as definitive statement of market shares in particular fixed line market segments.

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

**Revenue Market Share of Fixed Line Operators, Q3 2006**



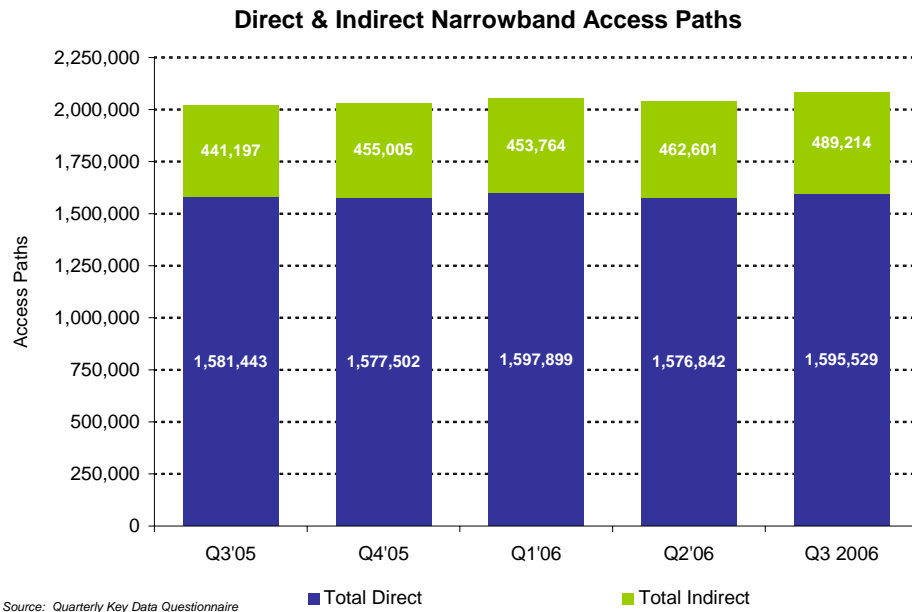
## 2.2 Fixed Line Access

### 2.2.1 Access Paths

Figure 2.2.1 presents the total number of narrowband fixed access paths (PSTN and ISDN) broken out by direct and indirect access<sup>6</sup>. There were almost 2.1 million direct and indirect PSTN and ISDN access paths in the Irish market in Q3 2006, a marginal increase since Q2 2006. ComReg now includes direct access provided by LLU in direct access paths, based on the assumption that the line is directly controlled by the alternative operator. The figures from Q3 2005 onwards in Figure 2.2.1 have been revised in line with this new approach. Indirect access paths totalled in excess of 489,000 in Q3 2006, a 6% increase since Q2 2006. Indirect access represents 23% of all access paths in the market, the same proportion as in Q2 2006.

<sup>6</sup> 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.

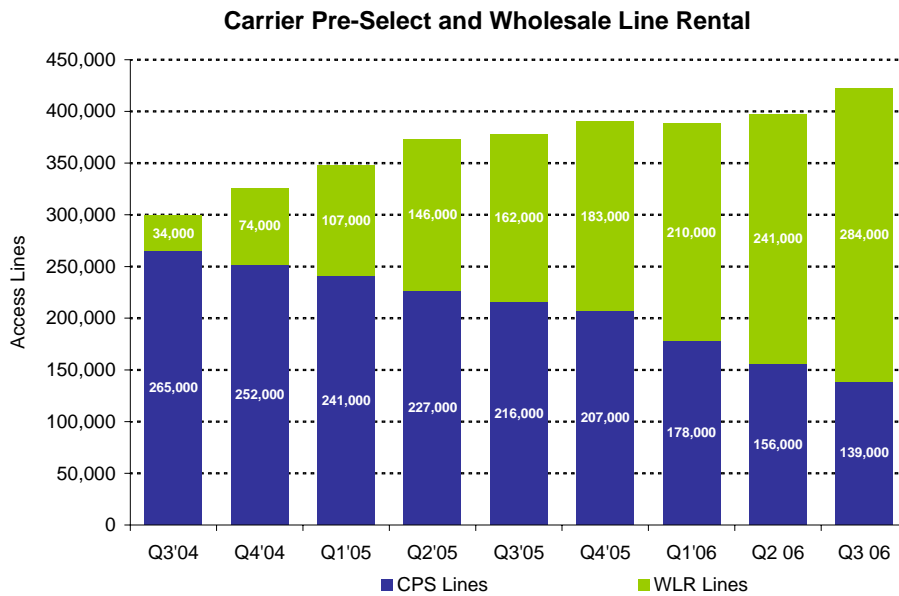
**Figure 2.2.1 - Fixed Access Paths**



**2.2.2 Indirect Access Lines**

Figure 2.2.2 illustrates the overall number of PSTN and ISDN lines provided by means of either Carrier Pre-Selection (CPS) only or Wholesale Line Rental (WLR). In Q3 2006, almost 423,000 lines were in service, enabling OAOs to provide indirect services to customers. The number of indirect access lines has increased by 7% in overall terms this quarter and by 12% in the 12 months to end of September 2006. Figure 2.2.2 charts the profile of indirect access in the Irish market. This chart shows how OAOs are increasingly preferring to offer single-bill services, i.e. WLR rather than CPS-only (i.e. calls only) services to customers. WLR lines managed by OAOs now account for 67% of indirect access lines compared to 11% in Q3 2004.

Figure 2.2.2 - Indirect Access Lines<sup>7</sup>



Source: Quarterly Key Data Questionnaire

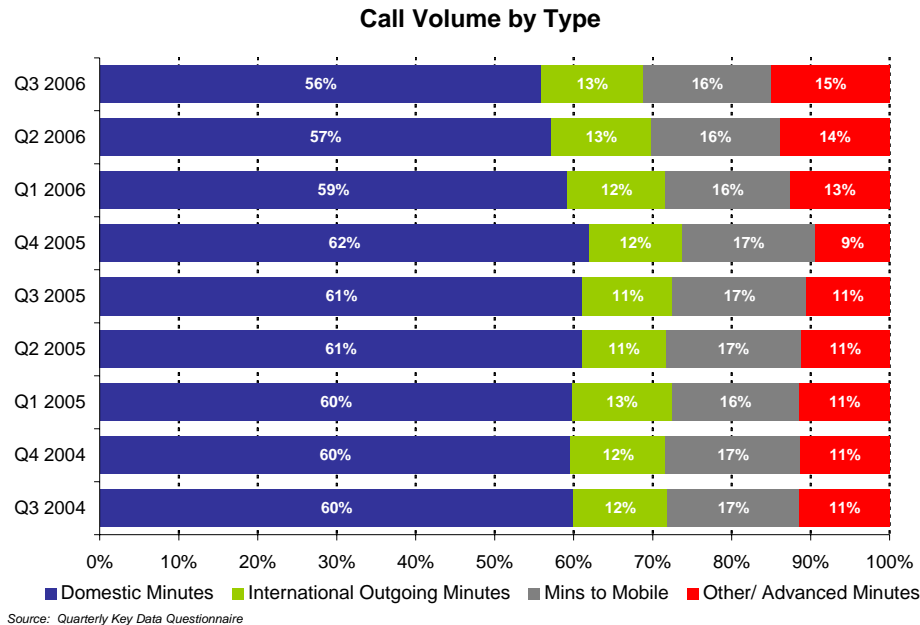
### 2.3 Fixed Voice Call Volumes

Figure 2.3.1 below illustrates the development of fixed voice call volumes in the last two years. Fixed call traffic in Q3 2006 reached just under 2.46bn minutes, a 5% decrease since Q2 2006, but overall relatively unchanged since Q3 2005.

Domestic local and national calls make up 56% of fixed line voice calls in this market, and volumes in this particular segment fell 7% this quarter. Calls to other minutes, which include a range of advanced services minutes increased in volume by 3% this quarter, and now account for 15% of all fixed line voice minutes.

<sup>7</sup> Number of lines are rounded to the nearest thousand

**Figure 2.3.1 – Fixed Voice Call Volume<sup>8</sup>**



## 2.4 Fixed Pricing Data

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

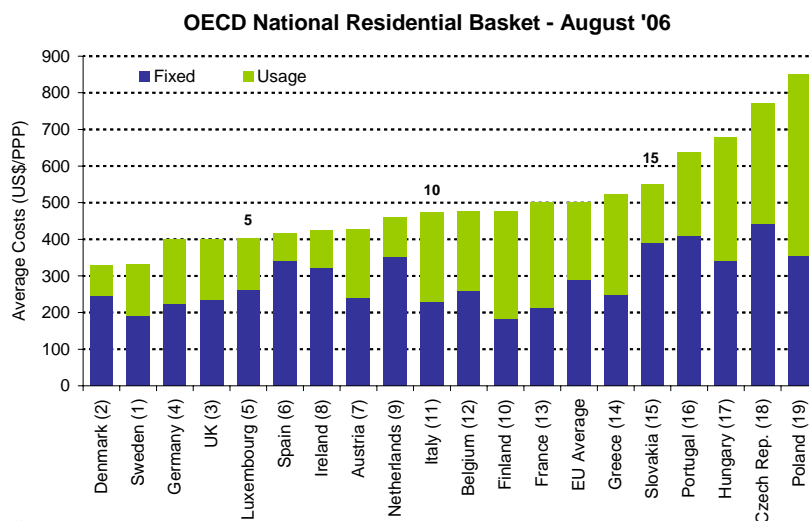
### 2.4.1 PSTN Baskets

#### 2.4.1.1 National Residential Basket

Figure 2.4.1.1 illustrates Ireland’s ranking in the national residential basket, based on a basket of calls and fixed costs. This chart is based on a comparison of the cheapest package or bundle available for a specific customer usage profile and in many cases will include a fixed charge bundled service. It should therefore be noted that the “fixed” element in this basket is not an indication of the cost of basic line rental. In August 2006 Ireland was ranked at 7<sup>th</sup> position, which was seven places better than the EU average in terms of price for this basket.

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

Figure 2.4.1.1 - OECD National Residential Basket – August 2006<sup>9</sup>

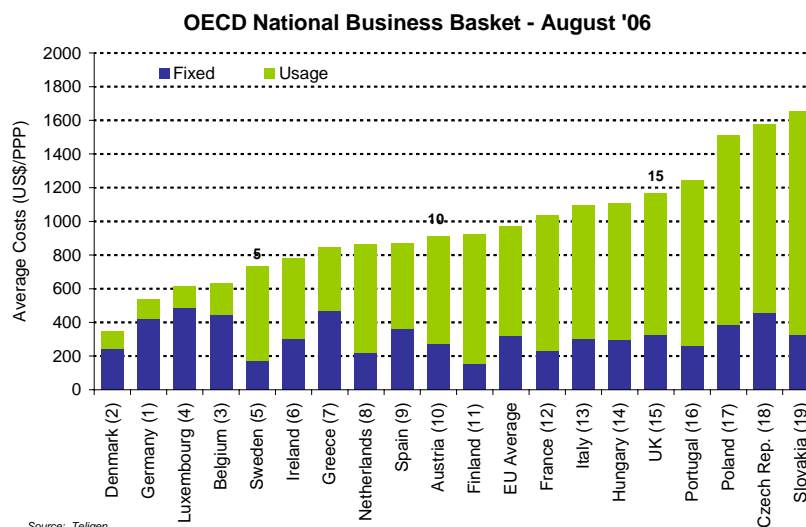


Source: Teligen  
 To note: The numbers in brackets represent each Member State's respective rankings as at May 2006

### 2.4.1.2 National Business Basket

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

Figure 2.4.1.2 - OECD National Business Basket – August 2006



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

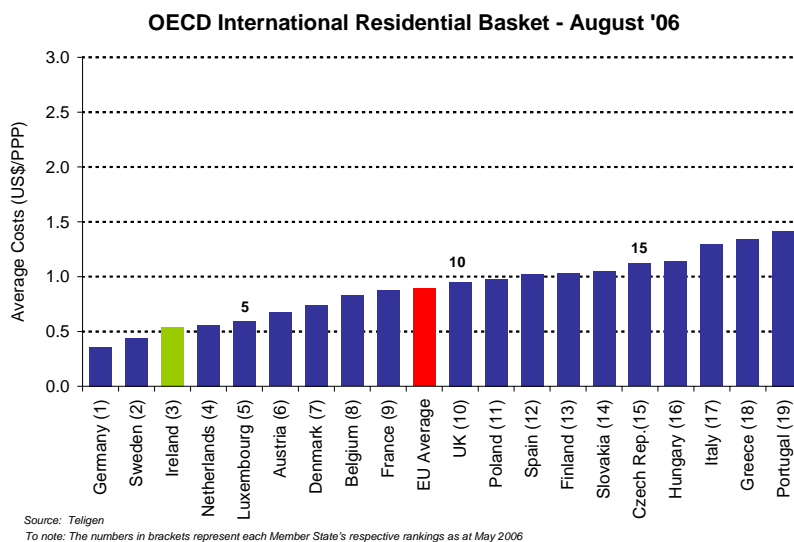
<sup>9</sup> Residential tariffs include VAT. VAT rates vary between member states.



### 2.4.2 International Residential Basket

Figure 2.4.1.3 shows that Ireland remains in 3<sup>rd</sup> position this quarter, and is seven places better than the EU average in terms of price.

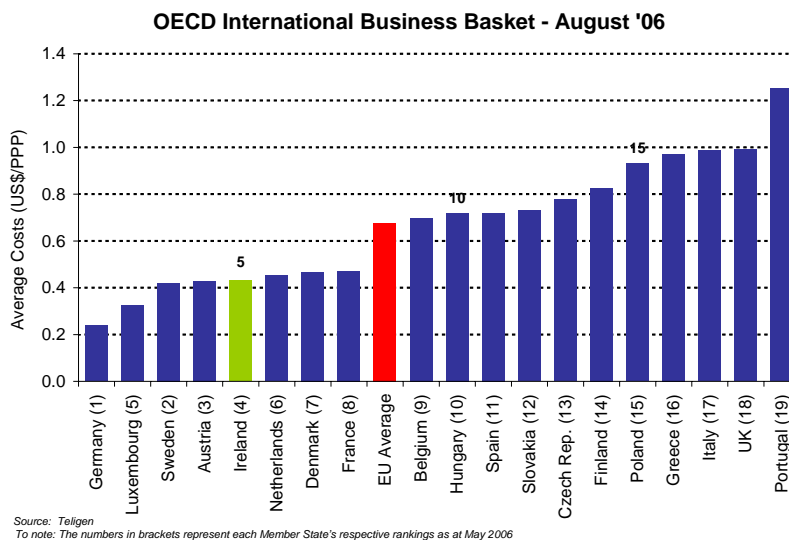
**Figure 2.4.1.3 - OECD International Residential Basket – August 2006<sup>10</sup>**



### 2.4.3 International Business Basket

Ireland has fallen to 5<sup>th</sup> place among EU countries analysed in the international business basket, but remains better than the EU average in terms of price.

**Figure 2.4.1.4 - OECD International Business Basket – August 2006**

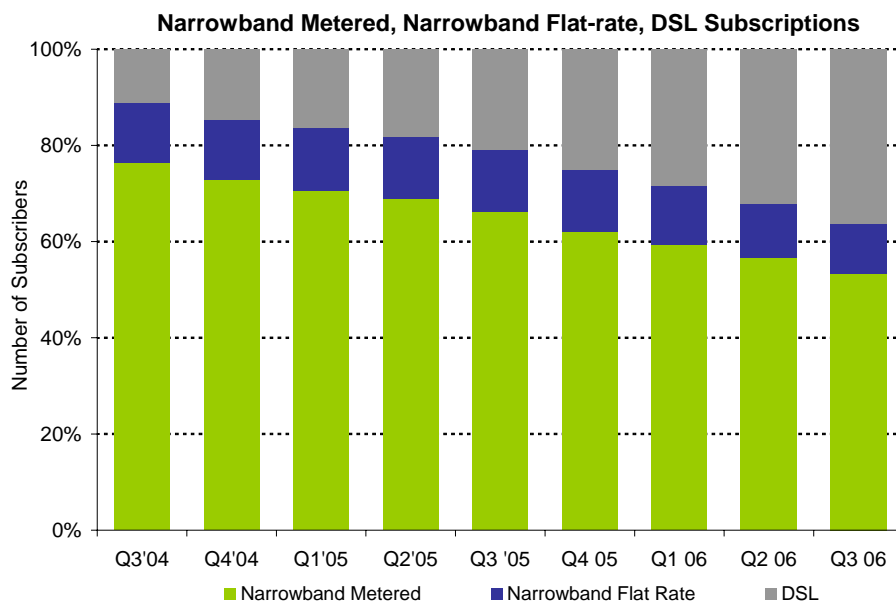


<sup>10</sup> Residential tariffs include VAT. VAT rates vary between member states.

## 2.5 Provision of Internet Services

Figure 2.5.1 describes the internet market for internet subscriptions using the copper telecoms network. It includes an analysis of metered narrowband subscriptions, flat-rate narrowband subscriptions and DSL<sup>11</sup>. There are a total of 881,000 active internet subscriptions on the copper telecoms network, 36% of these are DSL. Flat rate narrowband internet subscriptions make up a further 10% of these internet subscriptions, while active metered narrowband subscriptions account for the remaining 53% of internet subscriptions over copper.

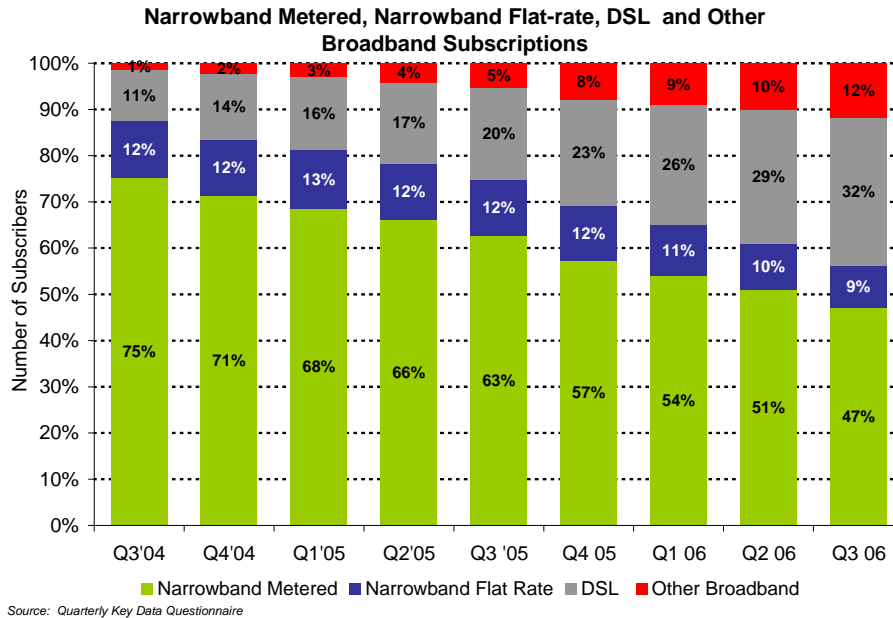
**Figure 2.5.1 – Number of Copper Based Internet Subscribers**



If the total internet market is considered, including platform competition from cable, fixed wireless, cable and satellite operators there are a total of almost 1 million internet subscriptions in Ireland. Figure 2.5.2 examines the profile of the total internet market in Ireland including all narrowband and broadband subscriptions regardless of platform. In Q3 2004, broadband subscriptions accounted for 12% of total internet subscriptions, in Q3 2006, broadband had increased its proportion of total internet subscriptions to now represent 44% of total internet subscriptions.

<sup>11</sup> DSL or ADSL refers to an asymmetric digital subscriber line, the means over which broadband speeds are delivered over the copper telecoms network.

**Figure 2.5.2 – Profile of Internet Subscribers in Ireland**

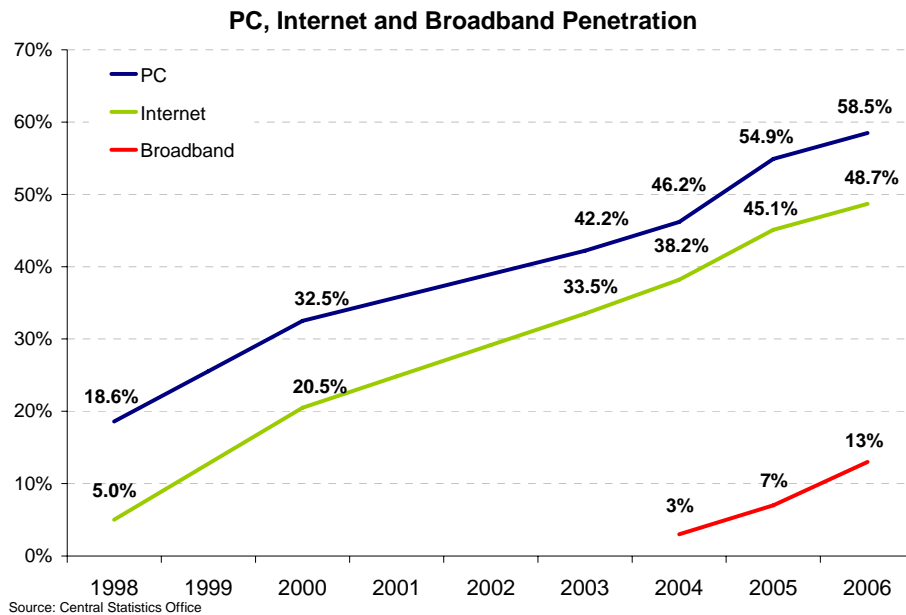


Internet subscriptions calculated in this analysis are derived from submissions from market operators in Ireland to the ComReg Quarterly Questionnaire<sup>12</sup>. In November 2006, the CSO published headline statistics for the 2006 Information Society and Telecommunications report<sup>13</sup>. Figure 2.5.3 details the growth in PC, internet and broadband penetration by household since 1998 based on this research, collected using a survey of 3000 households. The results conclude that in February 2006, over 58% of household in Ireland now have a personal computer or lap top in the home, and almost 49% of household have a home internet subscription. Furthermore, 13% of all households reported having a broadband connection in the home. The data indicates continued adoption of Information and Communications Technologies (ICTs) by Irish households. ComReg expects this trend to continue in 2007, and in particular for sustained strong growth in household penetration of broadband in the coming twelve months.

<sup>12</sup> Please note that data analysed is based on operator submission to the Quarterly Report Questionnaire. CSO data presented in this report is calculated using a survey of households use different methodologies. While providing two useful measurements of the extent of internet penetration and subscriptions in the Irish market they should not be considered directly comparable.

<sup>13</sup> <http://www.cso.ie/releasespublications/documents/industry/current/iss.pdf>

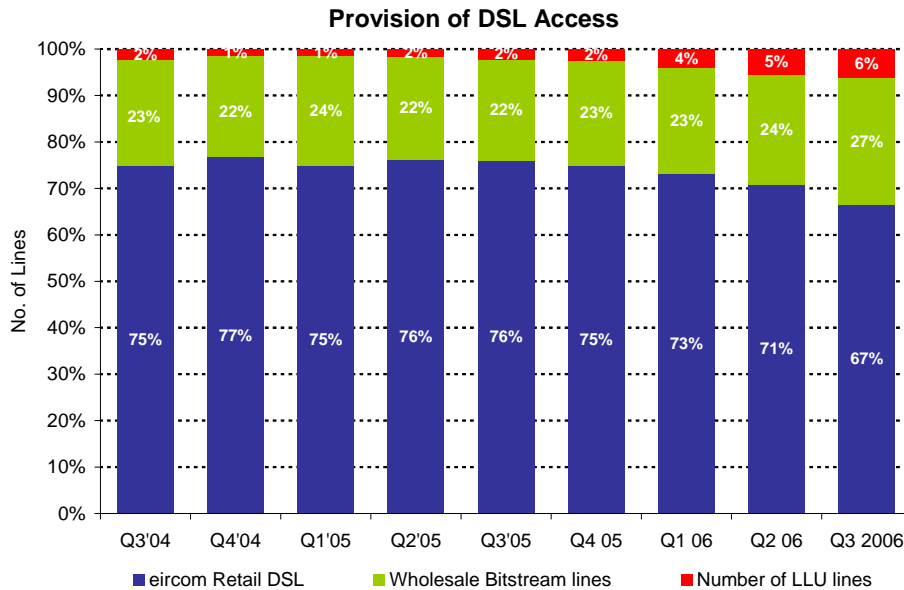
Figure 2.5.3 – Household Penetration of PCs, Internet and Broadband, 2006



## 2.6 Provision of DSL Access

Figure 2.6.1 profiles direct and indirect provision of DSL in the Irish telecoms market. Indirect DSL is provided by other authorised operators (OAOs) by means of *eircom's* wholesale bitstream products or fully unbundled loops. Wholesale Bitstream, which enables OAOs to resell *eircom's* DSL service, now accounts for 27% of all DSL connections. A further 6% of DSL lines are provided by OAOs using local-loop unbundling (LLU). At the end of September 2006 there were almost 19,900 local loops unbundled, a 32% quarterly increase in unbundled lines.

Figure 2.6.1 - Provision of DSL Access



Source: Quarterly Key Data Questionnaire

*eircom* currently retains 67% of retail market share for DSL subscriptions in the Irish market, a 4% decline since Q2 2006, and a 9% decline in market share since Q3 2005.

## 2.7 Provision of Broadband Services

Figure 2.7.1 summarises the total number of broadband subscribers at the end of the quarter by access technology. For the first time this quarter, ComReg has included the number of WiFi access points which provide broadband access via WiFi hotspots. Broadband hotspots are typically public wireless access points where a computer, usually a laptop, can connect to the internet. In Ireland, as in many countries, WiFi hotspots tend to be found in airports, hotel lobbies and cafés and restaurants. The number of WiFi access points is not included in total broadband subscriptions, but is noted to here indicate the growth levels in this form of broadband access in Ireland.

**Figure 2.7.1 – Broadband Subscribers and growth rates by Platform**

Platform	Q3 06 Subs	Quarterly Growth Q206- Q306	Year-on-Year Growth Q305- Q306
DSL	319,400	16%	91%
Cable	49,500	24%	174%
FWA	62,500	19%	154%
Other <sup>14</sup>	5,300	16%	139%
<b>Total</b>	<b>436,700</b>	<b>17%</b>	<b>106%</b>
Wifi Access Points	2496	+35%	n/a

DSL remains the largest broadband platform in terms of subscribers, accounting for 73% of all broadband subscriptions, with other platforms account for the remaining 27% of broadband connections. Figure 2.7.2 illustrates the growth in total broadband subscriptions in the Irish market since Q3 2004.

**Figure 2.7.2 – Broadband Subscribers by Platform**

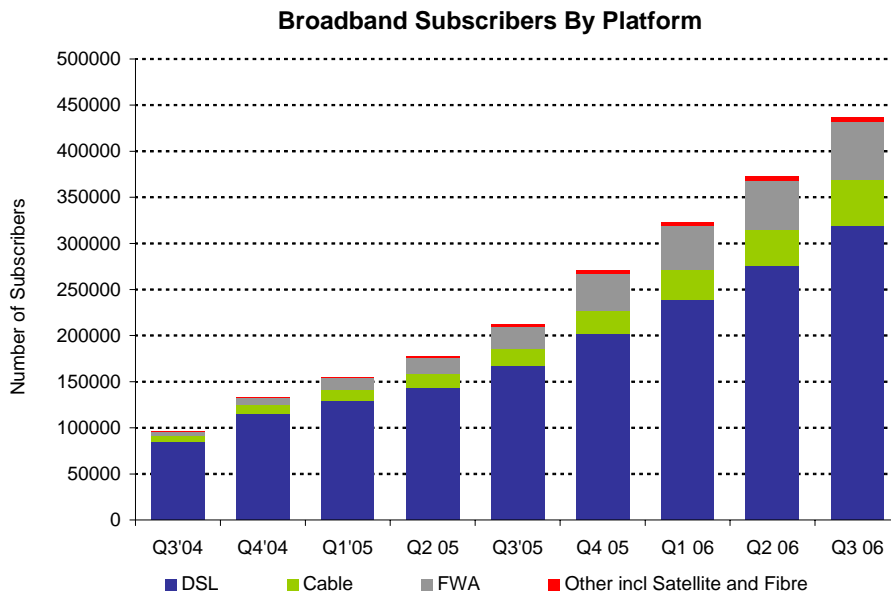


Figure 2.7.3 breaks down broadband subscribers to provide an estimate of the split of broadband subscriptions between business and residential subscribers. In Q3 2006, 71% of total broadband subscribers were classified as residential subscriptions.

<sup>14</sup> Other Broadband includes Satellite and Fibre to the Premises broadband subscriptions

**Figure 2.7.3 – Broadband Subscribers by Subscriber Type**

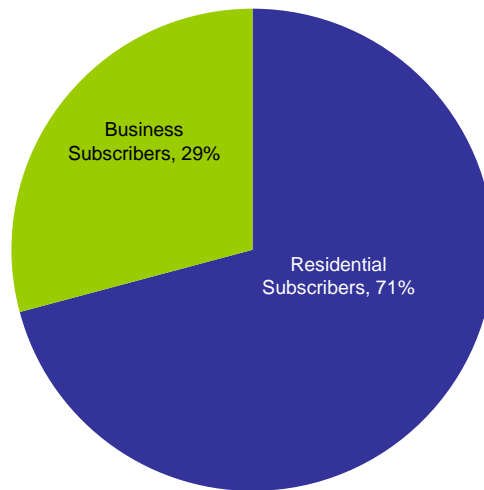


Figure 2.7.4 illustrates *eircom*'s share of total broadband subscriptions when examined alongside other authorised operators' (OAO) retail DSL lines and subscribers to other broadband access platforms. The figure indicates an increasing proportion of customers choosing an operator other than *eircom*, and alternative broadband platforms such as cable or wireless broadband. *eircom* now has 49% market share of retail broadband subscriptions, a decline of 3% since Q2 2006, and 11% since Q3 2005. Broadband provided over cable, fixed wireless, and satellite or fibre networks continues to grow as a proportion of total broadband connections. Platform competitors in the broadband market now represent 27% of all broadband subscriptions.

**Figure 2.7.4 – Market share of Total Broadband Market**

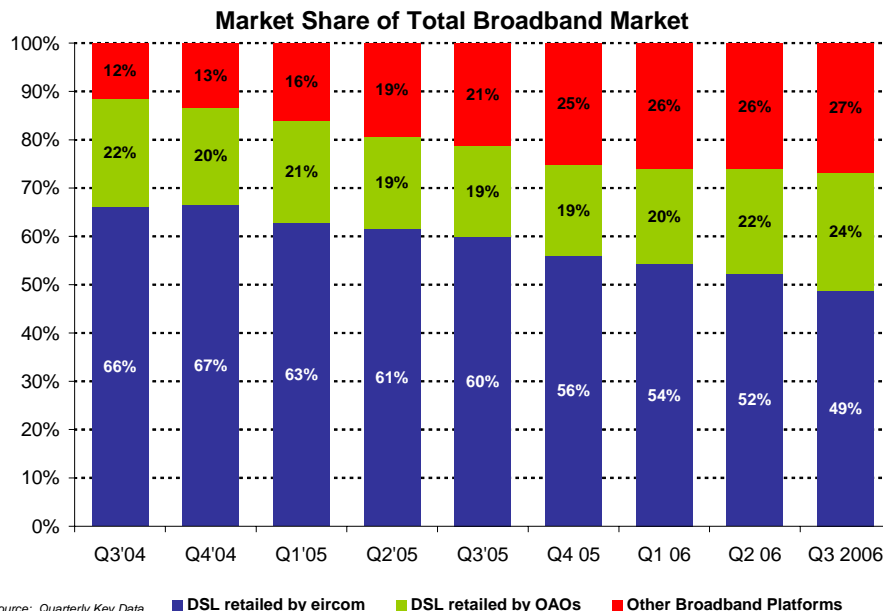
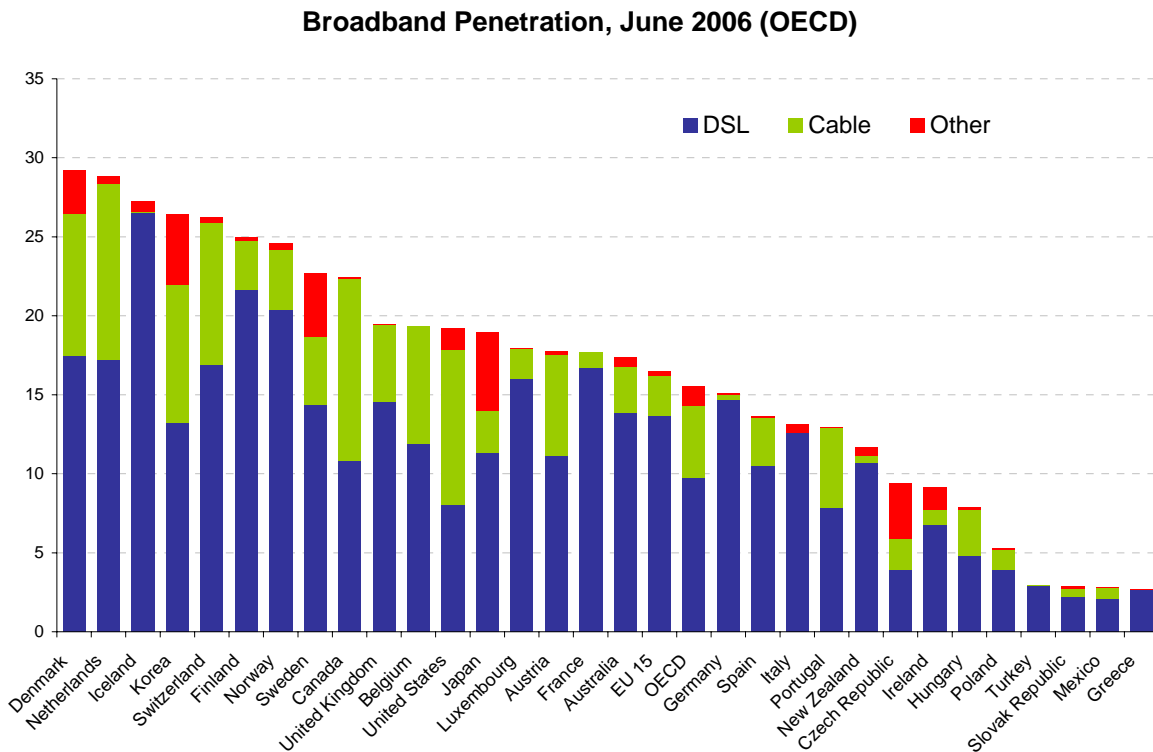


Figure 2.7.5 illustrates broadband penetration rates calculated by the OECD on a per capita basis for at the end of June, 2006<sup>15</sup>. In presenting broadband penetration benchmarks for European countries, ComReg uses both OECD and ECTA data using the most recent broadband benchmarking data available at the time of publication. The OECD Broadband Benchmarking analysis calculated Ireland’s broadband penetration at 9.2% in June 2006, compared to an overall OECD average of 15.5%. ComReg estimates that broadband penetration in September 2006 was 10.31%<sup>16</sup>.

**Figure 2.7.5 – Broadband Penetration Rate**



## 2.8 ADSL Pricing Data<sup>17</sup>

ComReg commissions Teligen to produce independent price benchmarking of broadband prices in the residential market across a number of EU member states. Previously, ComReg has used this analysis to publish two DSL baskets, which benchmarks a minimum and normalised (per MBit) basket for DSL.

<sup>15</sup> <http://www.oecd.org/dataoecd/50/49/37530046.xls>

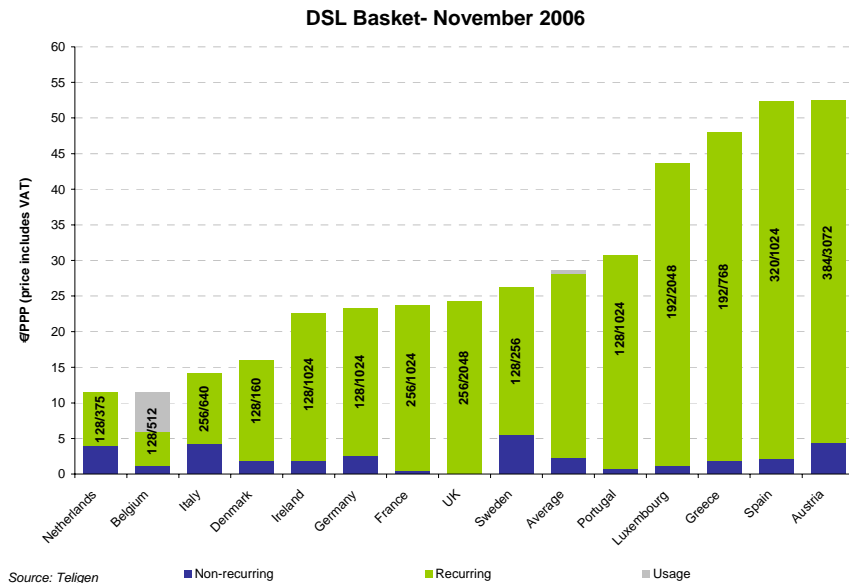
<sup>16</sup> Penetration rate is calculated based on total broadband subscriber numbers for DSL, Cable, FWA, and other broadband as a percentage of total population of 4.235 million based on the 2006 Census; source: CSO.

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



ComReg now presents a revised and enhanced set of broadband benchmarking baskets which have been compiled by Teligen, incorporating both DSL and cable products delivered to the residential market, based on a usage assumption for home broadband. The benchmarking model prices a range of DSL and cable services based on defined usage of 25 hours per month, with each session being 1 hour long in each country. It further assumes a download usage of 10 Gigabytes every month for each service. The data presented in the following two charts illustrates the cheapest product available in each country under these usage assumptions for residential DSL products, and for both DSL and cable offerings. Details on the upload and download speed for each of the analysed products are included in the figures. Further information on the composition of the new comparative broadband baskets can be found in the explanatory memorandum which accompanies this report<sup>18</sup>.

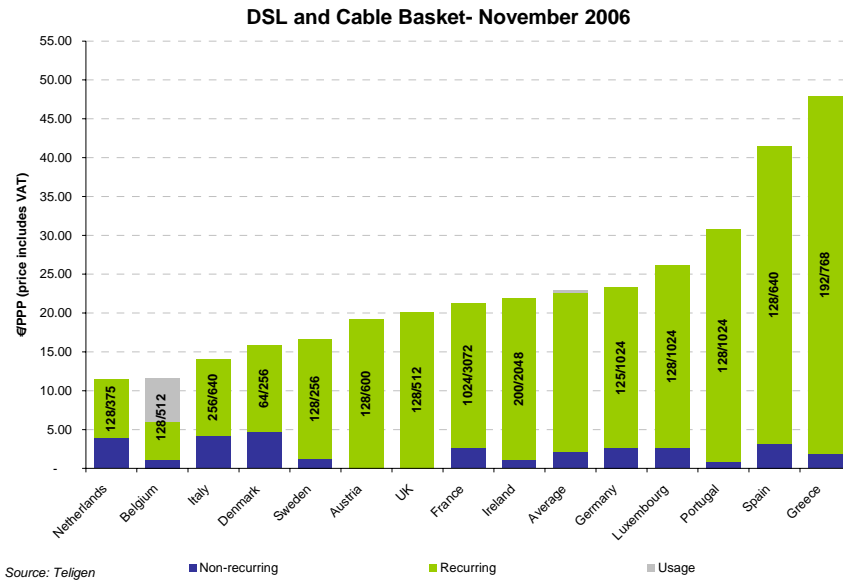
**Figure 2.8.1 – Lowest Monthly Rental ADSL Basket- November 2006**



Ireland is ranked 5<sup>th</sup> best priced DSL package for the user profile used to compose this basket, and is currently 5 places less expensive the EU average in this analysis.

<sup>18</sup> ComReg Document 06/68a

Figure 2.8.2 – Lowest Monthly Rental Cable and DSL Basket –November 2006



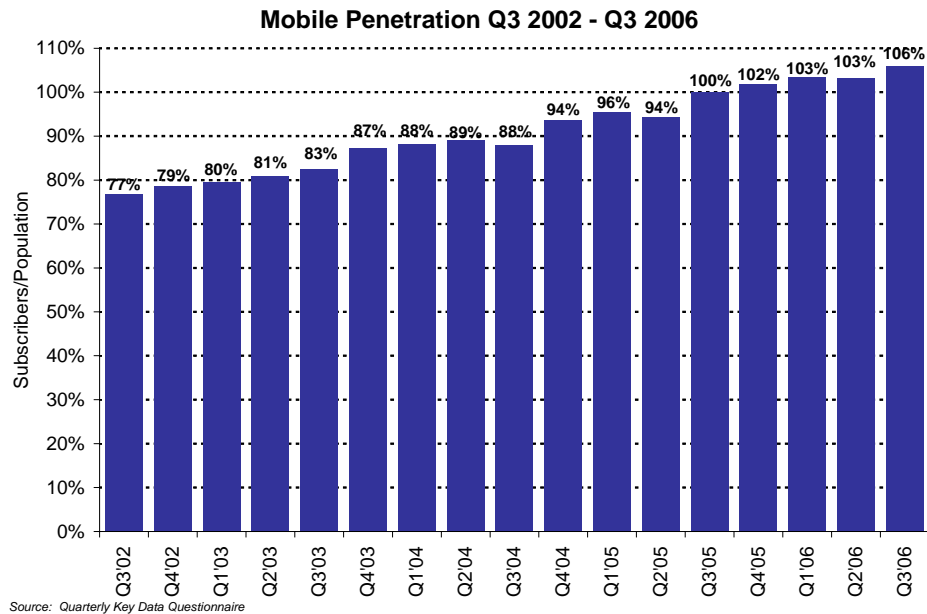
Ireland is ranked in 9<sup>th</sup> place in this basket, one place less expensive than the EU average price for this basket. In Ireland, this product relates to a cable broadband product offered by Chorus.

### 3 Mobile Market Data

#### 3.1 Number of Subscribers and Penetration Rate

##### 3.1.1 Irish Mobile Penetration Rate

Figure 3.1.1 – Irish Mobile Penetration Rate



There are 4.5 million 2G and 3G mobile subscribers in Ireland<sup>19</sup>. Figure 3.1.1 illustrates mobile penetration growth since the same period in 2002 and indicates a penetration rate of 106% in Q3 2006<sup>20</sup>. Subscribers in this report are calculated based on the number of active SIM cards and it should be noted that some mobile users may have more than one active SIM card.

##### 3.1.2 European Mobile Penetration Rates

Figure 3.1.2 illustrates national mobile penetration rates across the EU at the end of September 2006. Average EU penetration across EU-15 member states is estimated at 108%. Only four EU-15 members are estimated to have a mobile penetration less than 100%- Germany, Netherlands, Belgium and France.

<sup>19</sup> ComReg does not include a separate analysis of the 3G market in this report. In May 2006, Vodafone publicly announced having over 237,000 3G subscribers.

<sup>20</sup> Mobile penetration rate is based on a population estimate of 4.235 million based on the 2006 Census; source: CSO

Figure 3.1.2 – European Mobile Penetration Rates

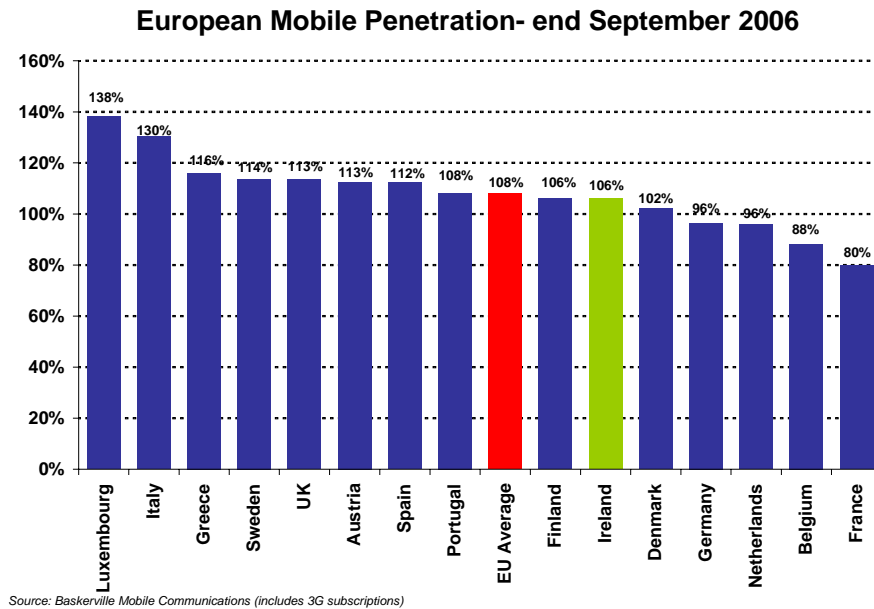
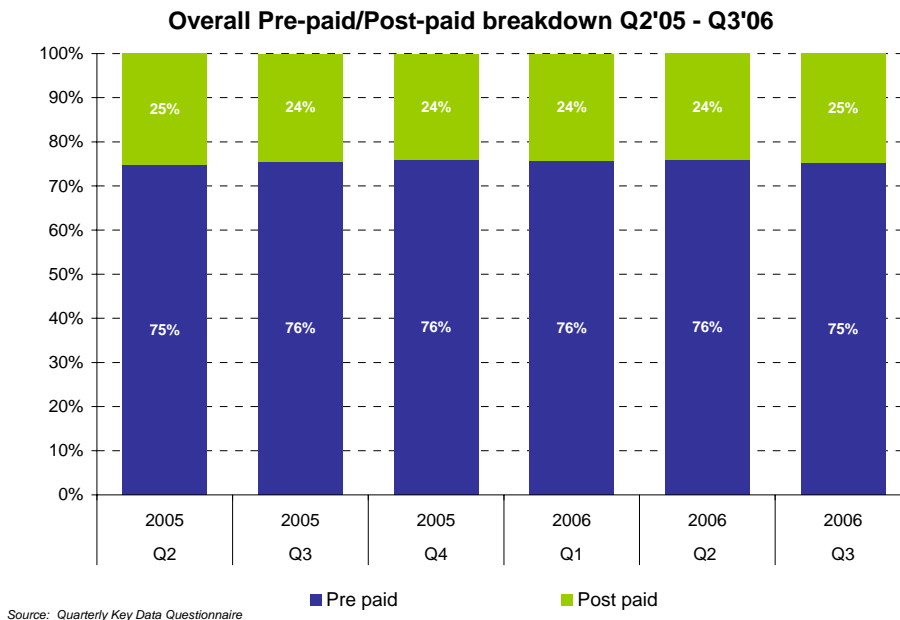


Figure 3.1.3 – Number of Subscribers (Pre-Paid/Post Paid)



### 3.1.3 Subscribers Pre-Paid / Post-Paid Comparison

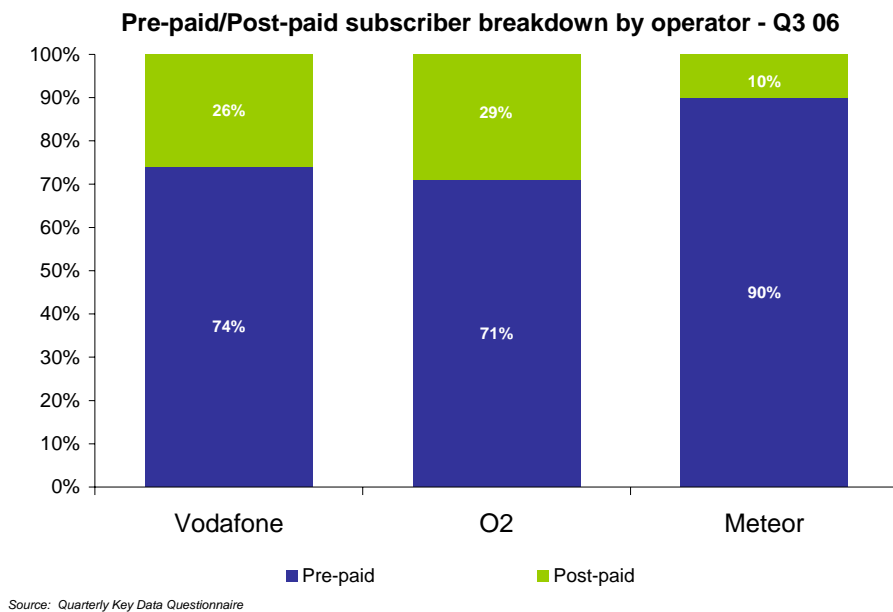
Figure 3.1.3 illustrates the breakdown of total mobile subscribers between pre-paid and post-paid subscriptions on both 2G and 3G networks. The proportion of pre-paid subscribers is 75%, a slight decrease in the proportion of pre-paid subscribers since Q2 2006.

Figure 3.1.4 shows the breakdown of customers for the three largest mobile operators in the market. Vodafone’s split between post-paid and pre-paid subscribers has remained the

same since the last quarter, and is down 1% from the same period last year, while Meteor and O2’s post-paid subscribers have increased by 2% and 1% respectively this quarter continuing the upward trend in the proportion of their post-paid subscriber figures over the last couple of years.

While Vodafone and O2 report 26% and 29% post-paid subscribers respectively, Meteor’s subscriber profile remains largely in the pre-paid sector. In Q3 2006, 10% of its customer base used a post-paid service; however this is a proportionate increase of 5% since Q3 2005, when 5% of Meteor’s customer base was post-paid subscribers.

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



### 3.2 Market Shares

Market share data illustrated by subscription and by retail revenue is presented for the largest three operators in the mobile market at time of publication. In Q3 2006, Meteor market share by subscription stood at 16.5%, a 5% increase since Q3 2005. It should be noted that all mobile operators added subscribers in the period.

Meteor’s market share in terms of revenue is 11.9% which represents a 1.1% increase in market share this quarter. There have been slight decreases in both Vodafone and O2’s market share by revenue in the period.

Figure 3.2.1 – Market Share – Number of Subscribers

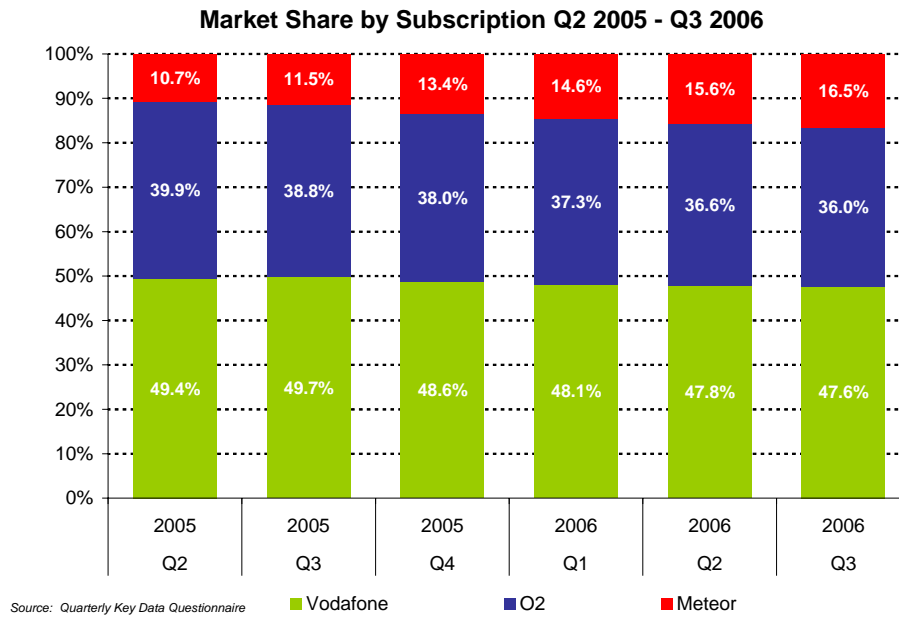
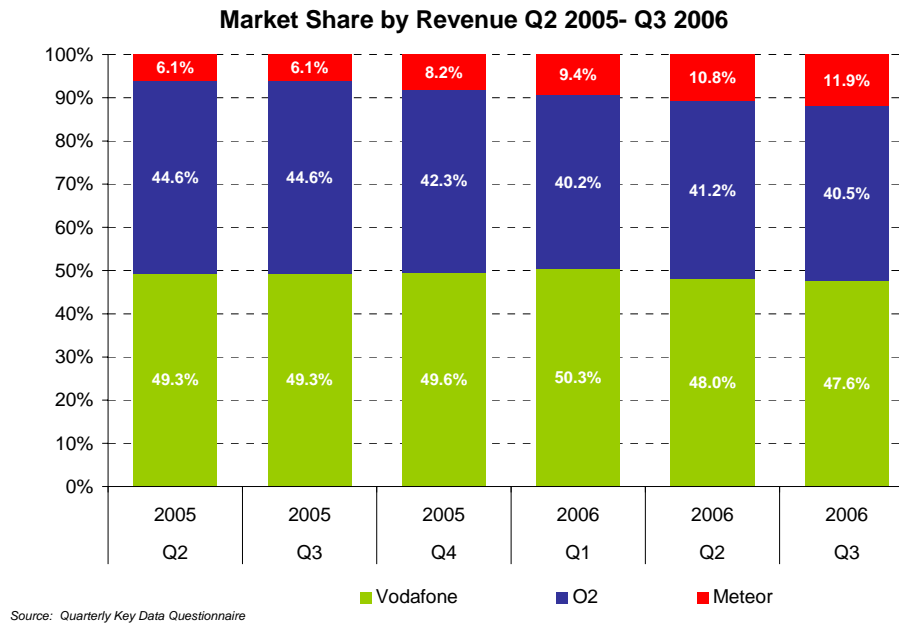


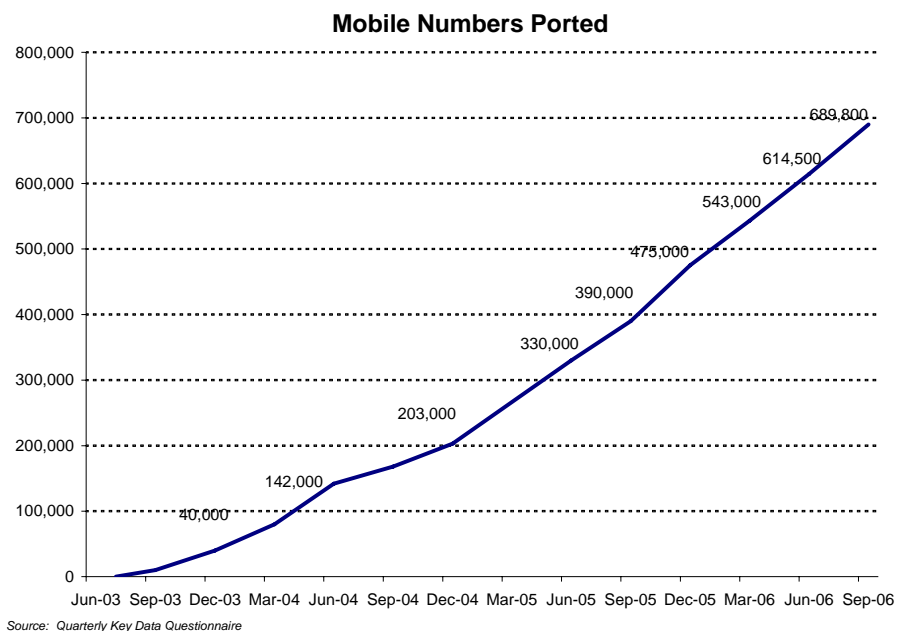
Figure 3.2.2 – Market Share – Revenue



### 3.3 Competitive Activity in the Mobile Market

Figure 3.3.1 outlines the growth in the use of MNP (mobile number portability) in the Irish market since its launch in June 2003. Mobile number portability allows mobile subscribers to switch mobile operator while retaining their mobile number. A total of 689,800 people have switched their mobile operator while retaining their mobile number since MNP was launched, with 75,300 mobile subscribers switching mobile operator while retaining their mobile number in Q3 2006.

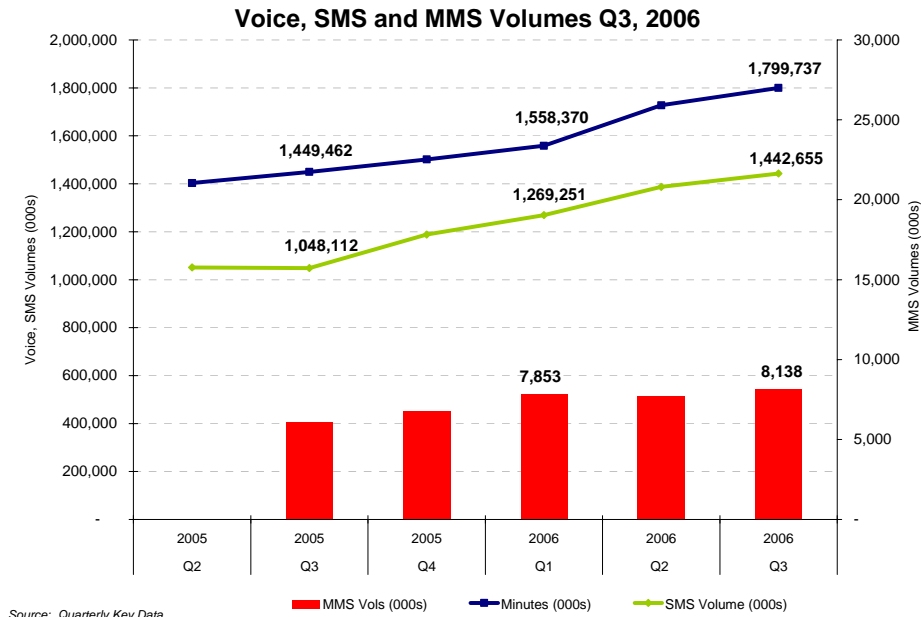
**Figure 3.3.1 – Mobile Numbers Ported**



### 3.4 Mobile Volumes

Figure 3.4.1 illustrates the growth in voice minutes, SMS, and MMS (Multimedia Messaging Service) messages sent since Q2 2005. Mobile voice traffic totalled nearly 1.8 billion minutes in the quarter, a 4% increase in the quarter, and a 24% increase in voice volumes year-on-year. The number of SMS messages sent this quarter increased by 4% based on revised SMS messages for Q2 2006, with over 1.4 billion messages being sent over the summer months. Year on year, the number of mobile messages sent by Irish mobile subscribers has increased by 38%. An average of nearly 107 SMS messages were sent per subscription per month in Q3 2006.

Figure 3.4.1 – SMS, MMS and Call Minutes



The number of MMS messages sent in the quarter remains relatively small when compared to voice and SMS volumes. There were almost 8.1 million MMS messages sent during the quarter.

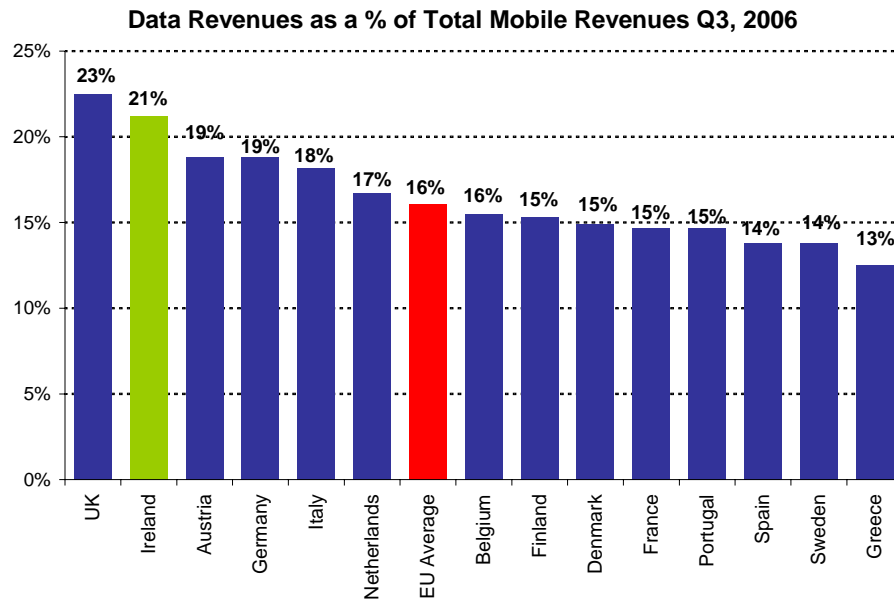
### 3.5 Mobile Revenues

#### 3.5.1 Mobile Revenues by Voice and Data

Mobile retail revenue for the quarter was €480 million, a slight increase on the previous quarter. Figure 3.5.1 outlines the percentage of mobile revenues attributable to data revenues in the Irish market. This benchmarking data is calculated independently by Yankee Group, and includes data revenues from SMS messaging, but also other data services such as MMS messaging, GPRS data services, 3G data services. Ireland has retained its position as having the 2nd highest level of data revenues as a percentage of total mobile revenues, at 21%, the same proportion of mobile revenues attributable to data as the previous two quarters.



Figure 3.5.1 - Data Revenues as % of Total Mobile Revenue<sup>21</sup>



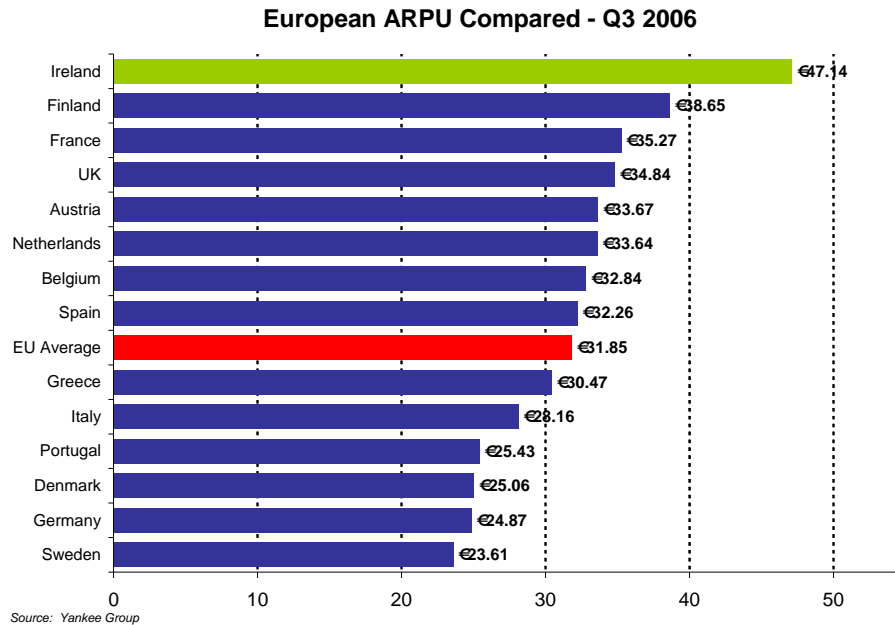
Source: Yankee Group

Figure 3.5.2 compares ARPU (average revenue per user) across several EU countries. Average revenue per user is an indication of average monthly spend by mobile subscribers in each country. ARPU is determined by the cost of telecoms services within each country and the levels of usage of mobile services by subscribers in each country. Mobile ARPU in Ireland is estimated at €47.14 per month in Q3 2006, a slight increase since the last quarter. Mobile ARPU in Ireland remains the highest among the EU member states monitored, and substantially higher than the EU average of €31.85<sup>22</sup>. Average ARPU across EU countries analysed has decreased by €0.39 in this quarter.

<sup>21</sup> Note that the graph relates to EU-15 countries except Luxembourg where no data was available.

<sup>22</sup> As far as possible, ARPU figures are obtained directly from operators. Where unavailable, ARPU is calculated by dividing annual service revenues by the mid-term installed base (the sum of the opening and closing customer bases for the period divided by two). Once the Yankee Group has obtained or calculated all individual ARPU figures, they are applied to each operator's mid-term user base to obtain service revenues by operator, which are then combined to obtain a country total. This total revenue figure is then divided by total mid-term users to derive country-level ARPU. Note that the graph relates to EU-15 countries except Luxembourg where no data was available.

Figure 3.5.2 - European ARPU Compared – Q3 2006



Average Revenue per User (ARPU) should be examined alongside levels of mobile usage in each member state. ComReg continues to work with industry to establish appropriate metrics for calculating minutes of use for mobile subscribers in Ireland, and hopes to publish this information in future Quarterly reports to provide additional analysis on the mobile market.

### 3.6 Mobile Pricing Data<sup>23</sup>

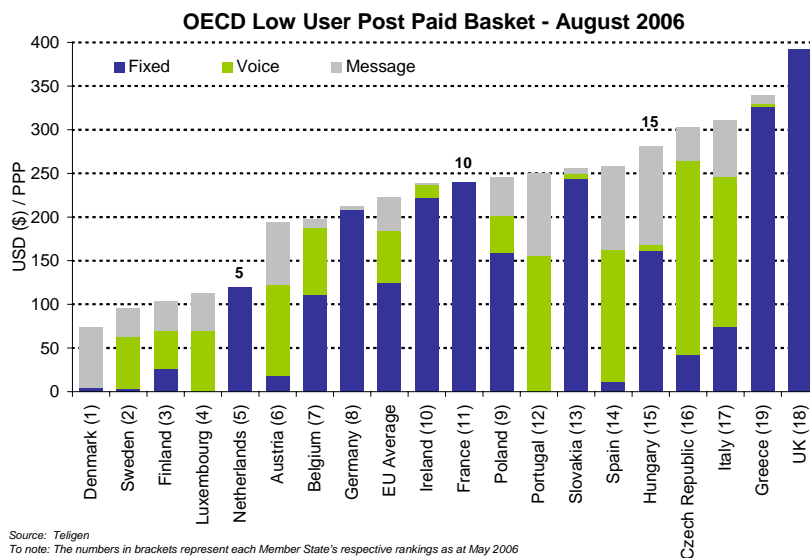
The Teligen mobile baskets presented in this Quarterly Report are based on an OECD-approved methodology based on specific usage levels for low, medium and high contract and pre-paid subscriber packages. They are calculated and analysed independently by Teligen, using an OECD methodology which includes PPPs (Purchasing Power Parities) to reflect the real cost of mobile services compared to all other prices 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.

<sup>23</sup> The 'Fixed' component of price refers to the standard charges imposed by operators, regardless of the amount of calls made (i.e. connection and rental). T-basket calculation of this figure is made up of: Installation Charge/5 + Rental charge for 1 year. The 'Voice' component of price refers to the charges imposed by operators, arising from the number of voice calls made by the user, while "Message" refers to the charges imposed by operators, arising from the number of SMS and MMS messages sent by the user.

### 3.6.1 Low User Post Paid Mobile Basket<sup>24</sup>

Ireland has improved by one position in this basket in the last quarter and is now ranked 9<sup>th</sup> out of the 19 EU countries analysed. This moves Ireland to one place behind the EU average price for this basket.

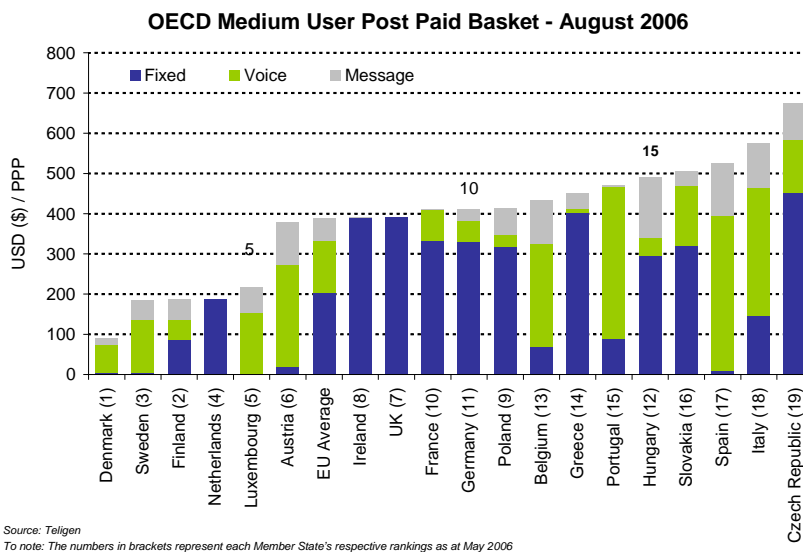
**Figure 3.6.1 - OECD Low User Post Paid Mobile Basket – August 2006**



### 3.6.2 Medium User Post Paid Mobile Basket

Ireland's position in this basket is ranked 7<sup>th</sup> among the 19 EU countries monitored, an improvement of one place since May. Ireland ranks one place behind the EU average.

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

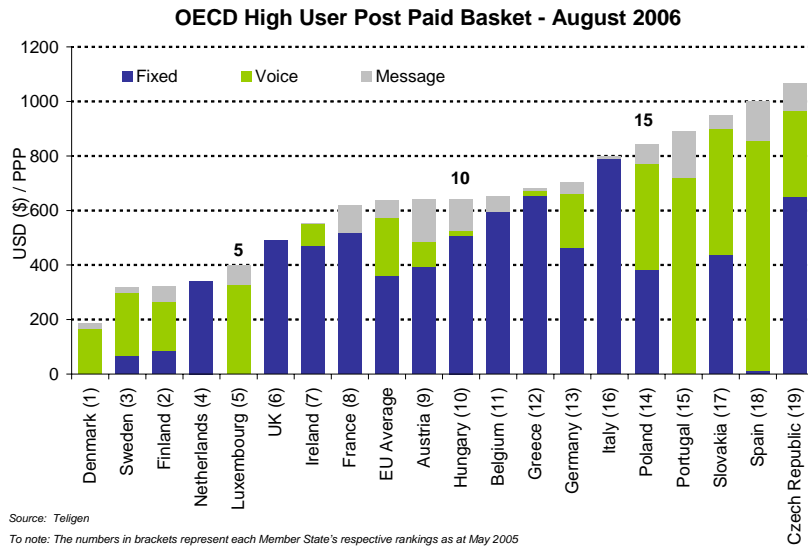


<sup>24</sup> All tariffs are inclusive of VAT, rates will vary between Member States

### 3.6.3 High User Post Paid Mobile Basket

Ranked 7<sup>th</sup>, Ireland’s position in the high user basket has remained unchanged since the last quarter, and is 2 places better than the EU average in terms of price.

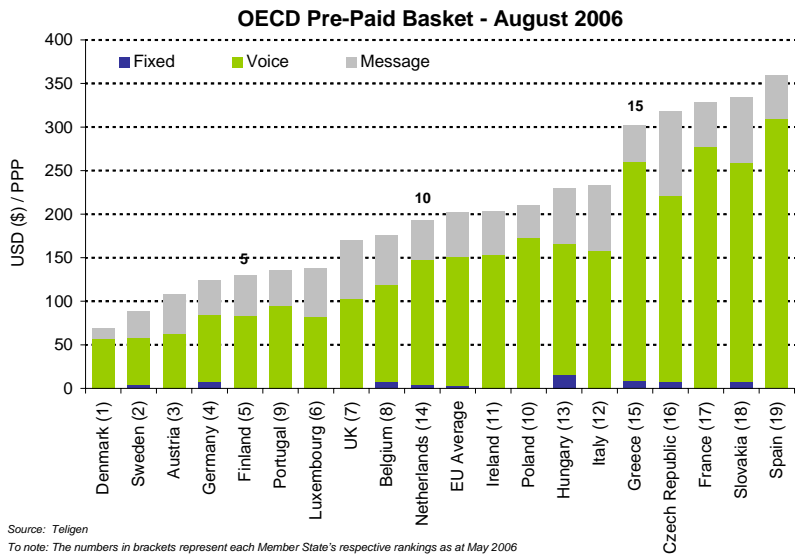
Figure 3.6.3 - OECD High User Post Paid Mobile Basket – August 2006



### 3.6.4 Pre-Paid Mobile Basket<sup>25</sup>

Ireland is ranked at 11<sup>th</sup> place in the pre-paid basket again this quarter, and is one place behind the EU average in terms of price among the 19 EU countries analysed.

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



<sup>25</sup> The OECD has found that there is little difference between the average pre-paid usage and low-user post-paid usage. Thus, the pre-paid and low user post paid baskets are based on the same usage assumptions.

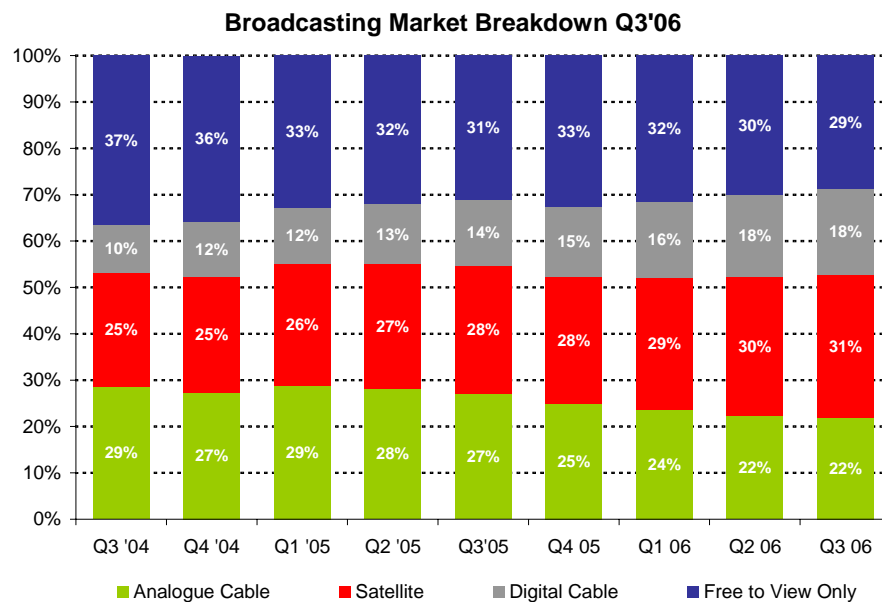
## 4 Broadcasting

### 4.1 Cable/MMDS & Satellite

The broadcasting analysis provided in this report uses broadcasting operator data in conjunction with CSO estimates of the total number of TV households in Ireland. This is particularly relevant in deriving the number of households<sup>26</sup> who only use a free-to-air television service.

At the end of September 2006, there were approximately 576,000 subscribers to cable/MMDS television services in Ireland. The cable/MMDS market continues to experience a migration from analogue to digital subscriptions, with digital subscribers now representing 46% of cable/MMDS subscribers. At the 30<sup>th</sup> September 2006, BSkyB reported 441,000 Irish subscribers, a 3% increase in subscriptions for the quarter, and an 18.5% increase in subscriptions year-on-year<sup>27</sup>. The total number of pay TV households in Ireland (cable/MMDS and satellite) is almost 1.1 million.

Figure 4.1.1 - Take Up of Broadcasting Services



Source: Quarterly Key Data Questionnaire, BSkyB

At the end of the September 2006, there were approximately 705,000 digital TV subscribers which include cable/MMDS and satellite customers. Almost half of all TV households in

<sup>26</sup> Up to Q3'05, ComReg estimate of the number of TV households was 1.35 million based on CSO data. The Information Society and Telecommunications report, published by the CSO in February 2006, suggested the total number of households with a television in 2005 was 1.43 million. Therefore, since Q4 2005, ComReg's analysis of the total market breakdown and penetration data for the broadcasting market is now based on this new estimate.

<sup>27</sup> This is based on public announcements by Sky

Ireland now receive their TV through a digital television signal, either digital cable, or satellite.

**Figure 4.1.2 - Pay TV Market (Analogue and Digital)**

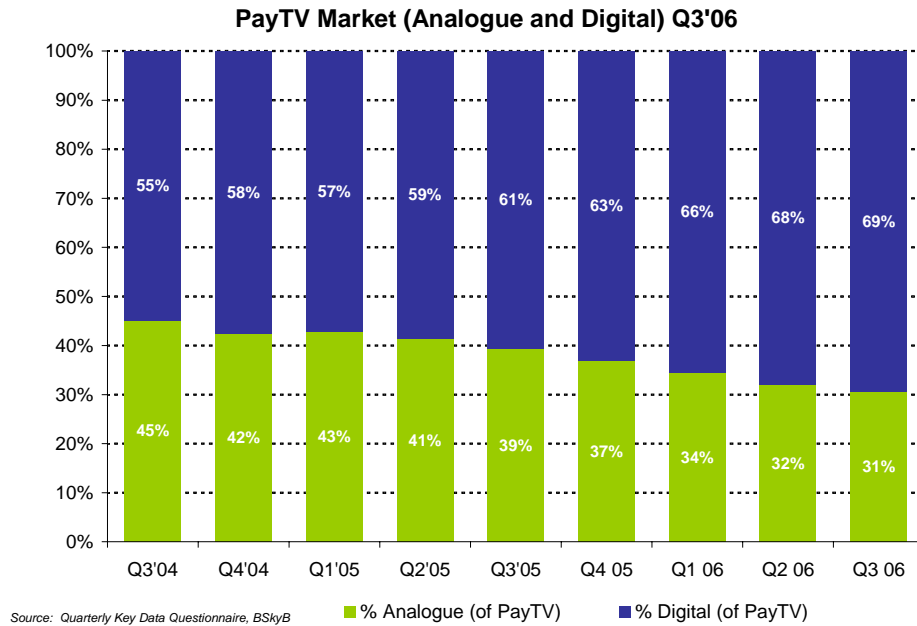
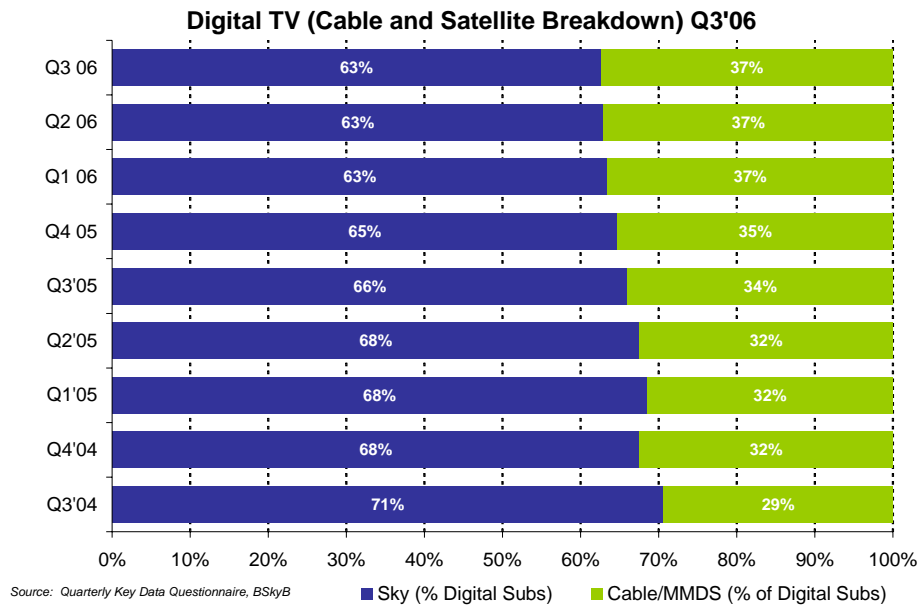


Figure 4.1.2 profiles the pay-TV market in Ireland comparing the use of an analogue digital single, provided by cable operators, and digital TV, provided via either a digital cable service, or satellite service. The figure indicates that 69% of pay-TV households receive a digital TV signal, and increased of 1% since Q2 2005, and 8% increase since Q2 2005.

Figure 4.1.4 examines the profile of the digital TV market, examining the percentage of digital subscribers who receive their TV signal through either a satellite subscription or using digital cable. The profile of this group of TV households remains unchanged this quarter, with 63% of digital TV households using a satellite service to receive digital TV. Since Q3 2004, digital cable's proportion of this sector has increased from 29% to 37%.

Figure 4.1.3 - Digital TV (Cable and Satellite Breakdown)



## 5 Emerging Trends- Future Broadband Applications

### 5.1 Current use of the Internet and Broadband in Ireland

At the end of September, broadband services accounted for close to half of all internet subscriptions. Subscribing to a broadband internet connection offers internet subscribers increased download and upload speeds, an always-on connection, and the ability to access a range of “bandwidth rich” applications and internet based services to provide an enriched internet experience and ability to access a wider range of services online.

In a recently published wave of the ComReg Amárach Trends survey series<sup>28</sup> home internet users were asked about the range of activities they performed on their home internet connection. An analysis of activities based on whether these customers had a narrowband or broadband connection is summarised below.

**Figure 5.1.1: Range of internet activities performed by home internet users, profiled by internet subscription type.**

Activity	Broadband Users	Narrowband Users
Information Search	72%	65%
General Browsing	71%	64%
Email Communication	68%	63%
General Entertainment	37%	23%
News Updates	31%	17%
Downloading Online Material	27%	18%
Shopping	23%	20%
Banking	23%	16%
Playing Games Online	21%	12%
Webchat/ Online Communities	11%	7%
VoIP	7%	3%
Other	6%	3%

Broadband users reported a wider range of activities than narrowband users; the average home broadband user responded with an average of over 4 different reported activities, while the average narrowband user had an average of just over 3 separate reported activities. Home broadband users were also much more likely to be able to use their home connection for the downloading of online media, using the internet as an entertainment tool, playing games, and managing their banking online.

<sup>28</sup> [http://www.comreg.ie/\\_fileupload/publications/ComReg0664.pdf](http://www.comreg.ie/_fileupload/publications/ComReg0664.pdf)



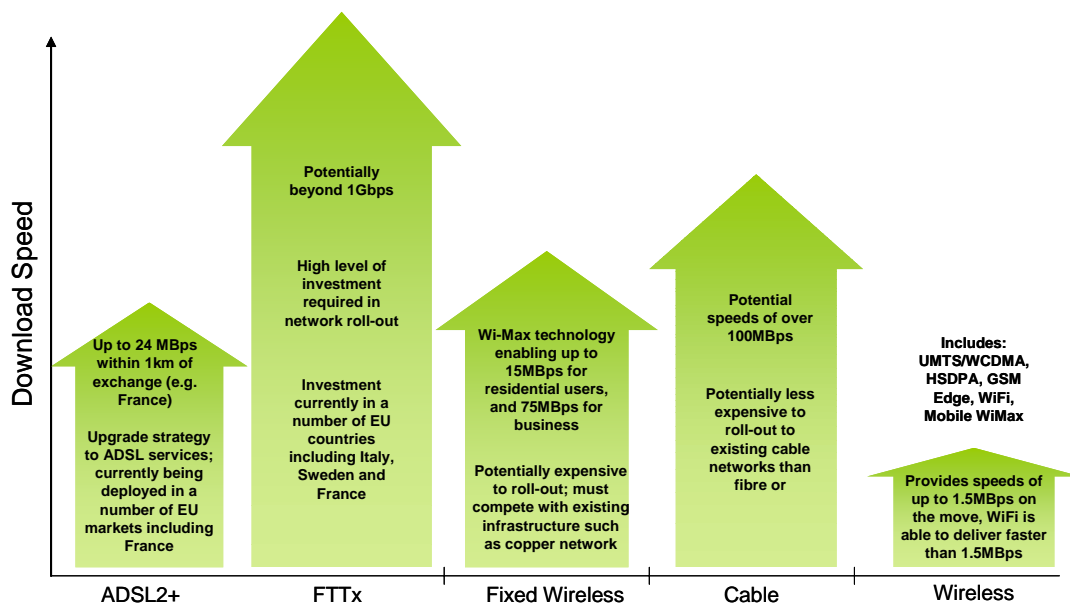
As the speed of broadband connections increases, the range of activities that will be able to be performed and experienced over home broadband is likely to expand further. Services such as a range of internet based voice and video conferencing, high definition broadcasting, and a range of other services could all be delivered to home broadband subscribers.

## 5.2 Delivering Increasingly Fast Broadband

Currently broadband is delivered to Irish consumers using either DSL services over the telephone network, cable broadband, fixed wireless access, and smaller numbers of satellite and fibre connections. Most broadband subscriptions targeted at the consumer market in Ireland currently offer download speeds of between 512Kbps and 4Mbps. Future provision of content-rich services such as high quality TV services over DSL, home video-calling and networked home services could require broadband speeds in excess of 20Mbps.

A number of technological and infrastructural developments across Europe are enabling very fast broadband services to be developed and rolled out to customers. Figure 5.2.1 examines some key access technologies over which very fast broadband may be delivered, and the likely speeds which these networks are capable of delivering.

**Figure 5.2.1: Platforms for delivering very fast broadband and potential download speeds for these technologies.**

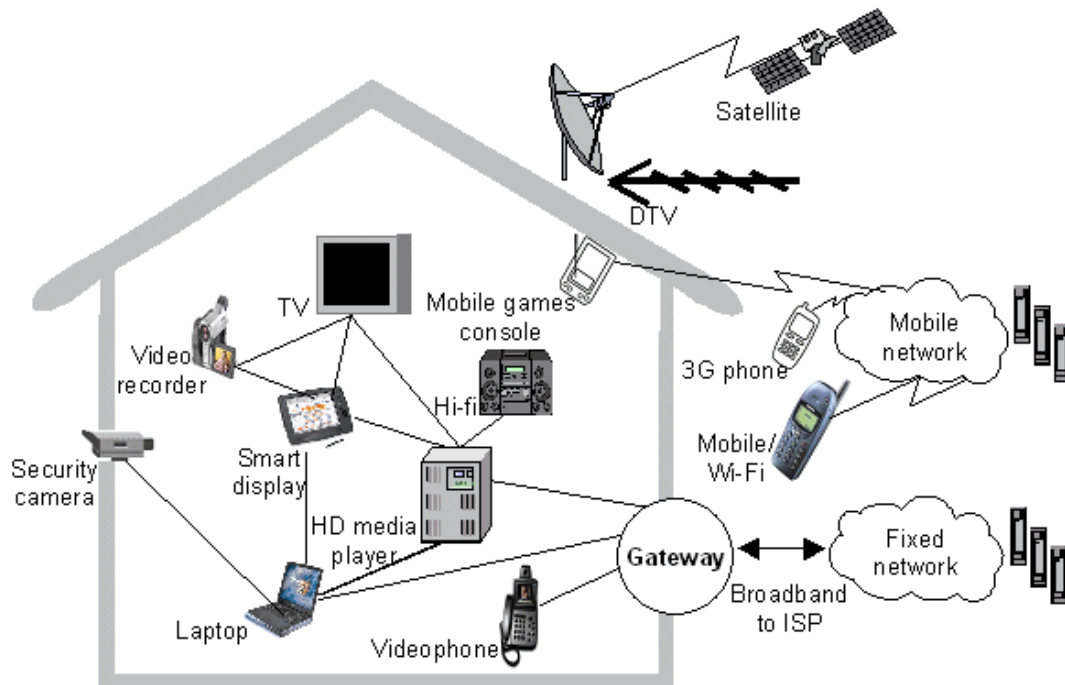


The development of networks associated with very fast broadband solutions comes at considerable cost to operators. Current estimates vary greatly depending on factors such as present network capacity, the geographic spread of subscribers and the type of technology deployed, but typically estimate the cost of network roll-out at between €50 and €400 per subscriber.

### 5.3 What Services will be Available in the Broadband Home?

It is likely that broadband speeds of 20Mbps and beyond will enable service providers to supply a wide range of communication, data, entertainment and other services. The broadband home will see multiple services operating alongside one another, all controlled from a central portal in the home. Figure 5.3.1 from Analysys Consulting, examines the range of offerings which may make up the broadband home.

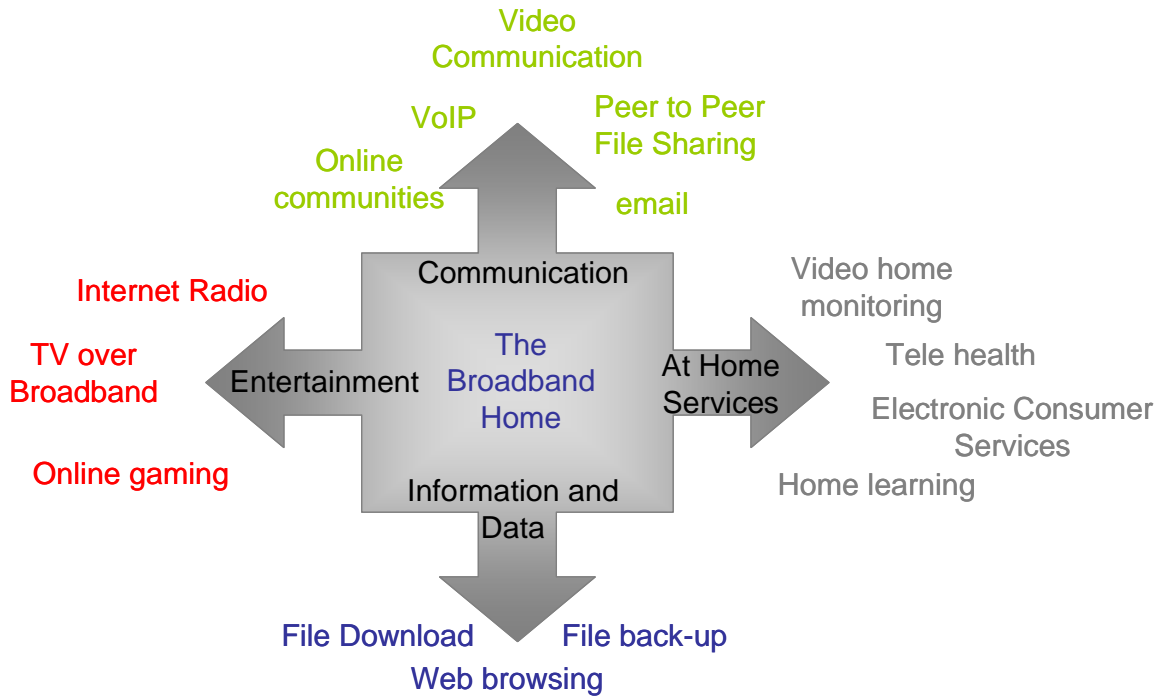
**Figure 5.3.1: The Broadband Home, Source: Analysys Research, 2004**



A central device in the home, described by Analysys as a “smart display” will be a combined universal remote control and portal for a full range of services. It is projected that in addition to current telecoms and entertainment services which are currently provided separately, very fast broadband will enable these and other services in an integrated, bundled offering over a single network. Consumers will be able to use these services interchangeably with currently separate services talking to each other within the home, and to the broadband-enabled homes of friends and family. Figure 5.3.2 outlines the type of services for which a consumer may be able to

use their home broadband service, based on research commissioned by the Broadband Stakeholder Group in the UK<sup>29</sup>.

**Figure 5.3.2: The Range of Likely Services Delivered over Very Fast Broadband**



<sup>29</sup> [http://www.broadbanduk.org/reports/BSG%20reports/BSG\\_reports\\_12\\_05\\_06.htm](http://www.broadbanduk.org/reports/BSG%20reports/BSG_reports_12_05_06.htm)