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Telecommunications and the consumer, 1998-2008

Presentation by Patricia Dowling, ComReg, March 12th 2009

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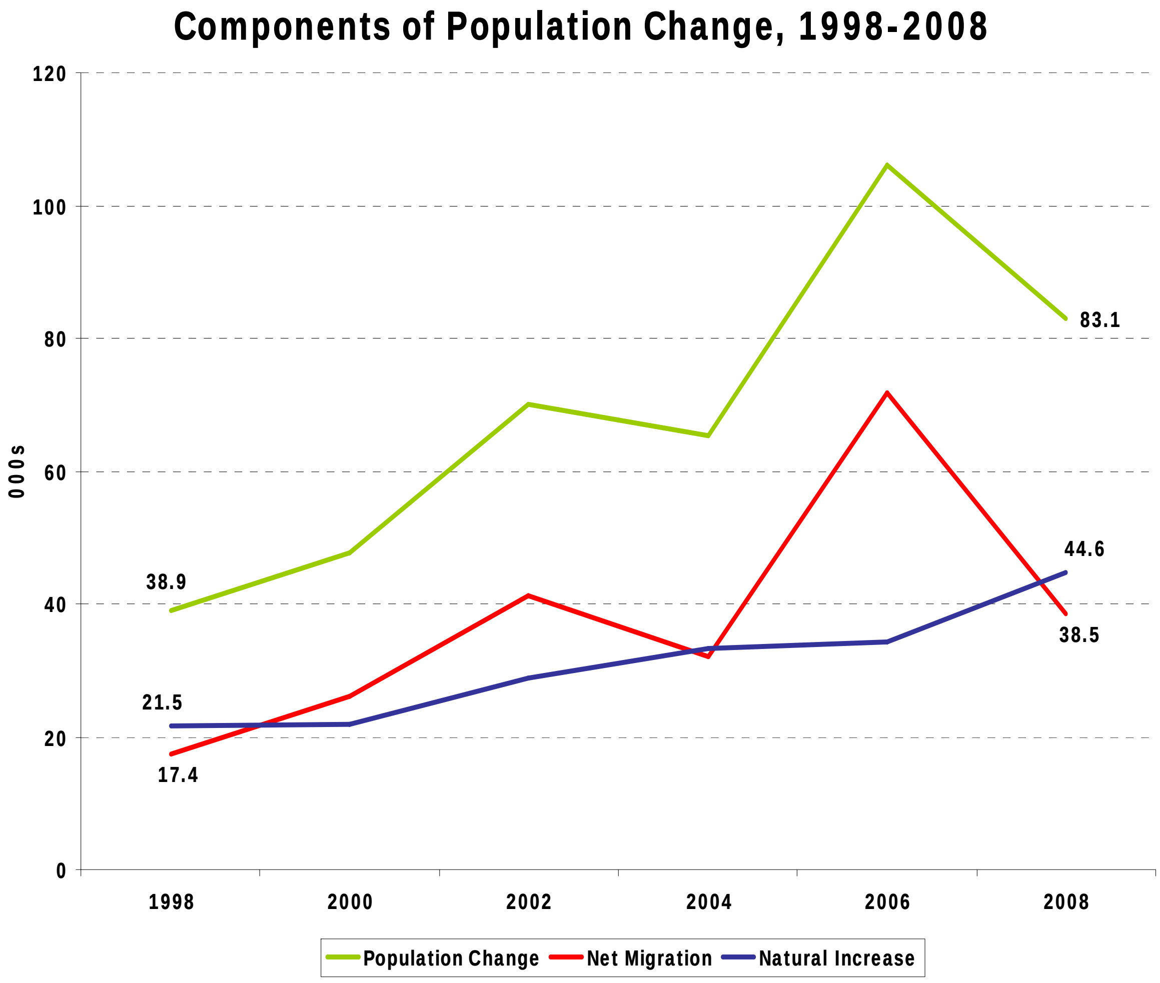
Presentation Outline

- How has Irish society changed in the past decade?
- How has the Irish telecommunications market changed in the past decade?
- How has consumer access to and usage of communications technology developed over the past decade?

Population Change

- Annual population growth for Ireland in from 1997 to 1998 was 38,000, while between 2007 and 2008 the population grew by over 83,000.

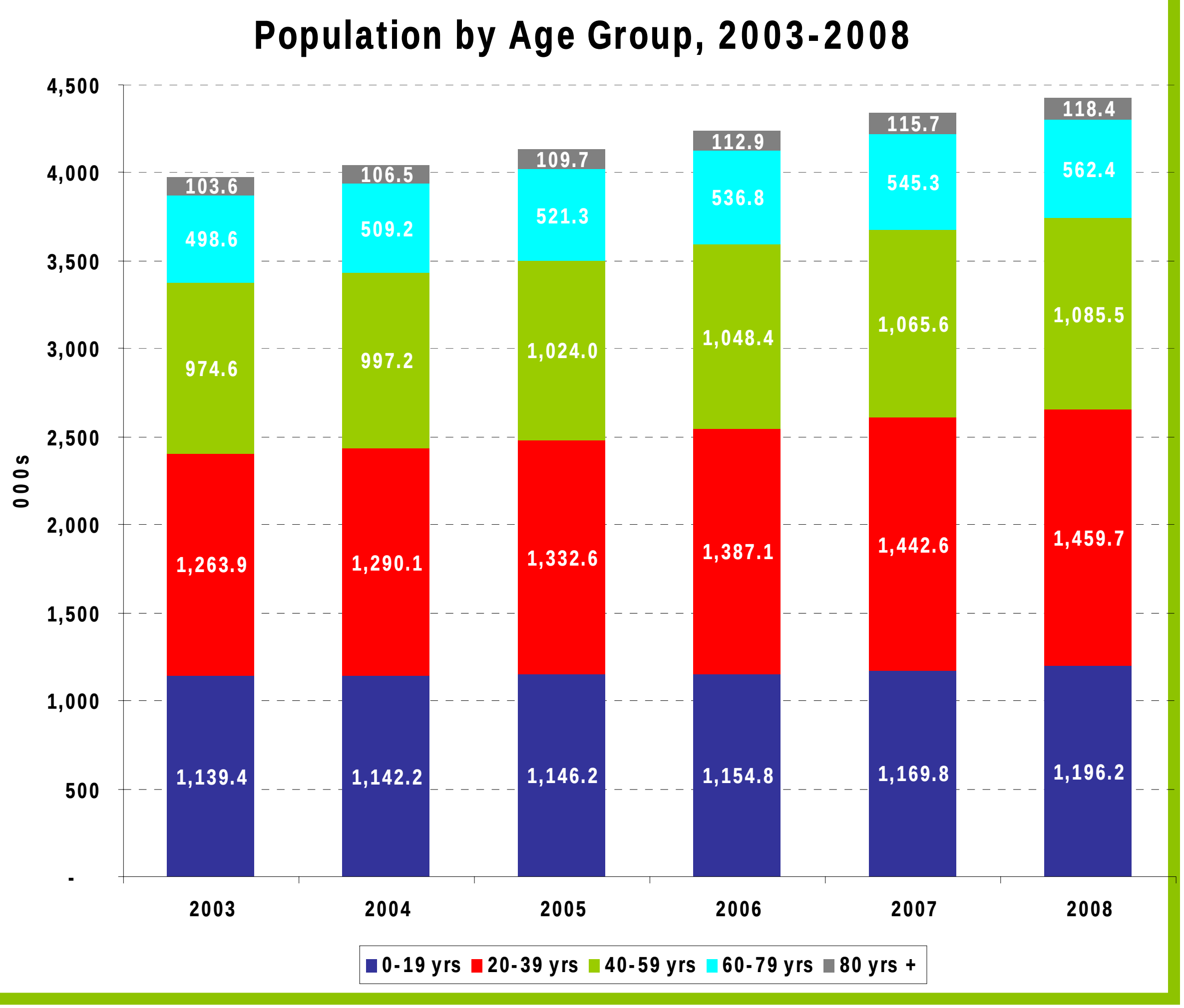
- Net migration has played an important role in the growth of Ireland's population. Net migration has increased by 121% over the last 10 years.



Source: Central Statistics Office

Age Composition of the Irish Population

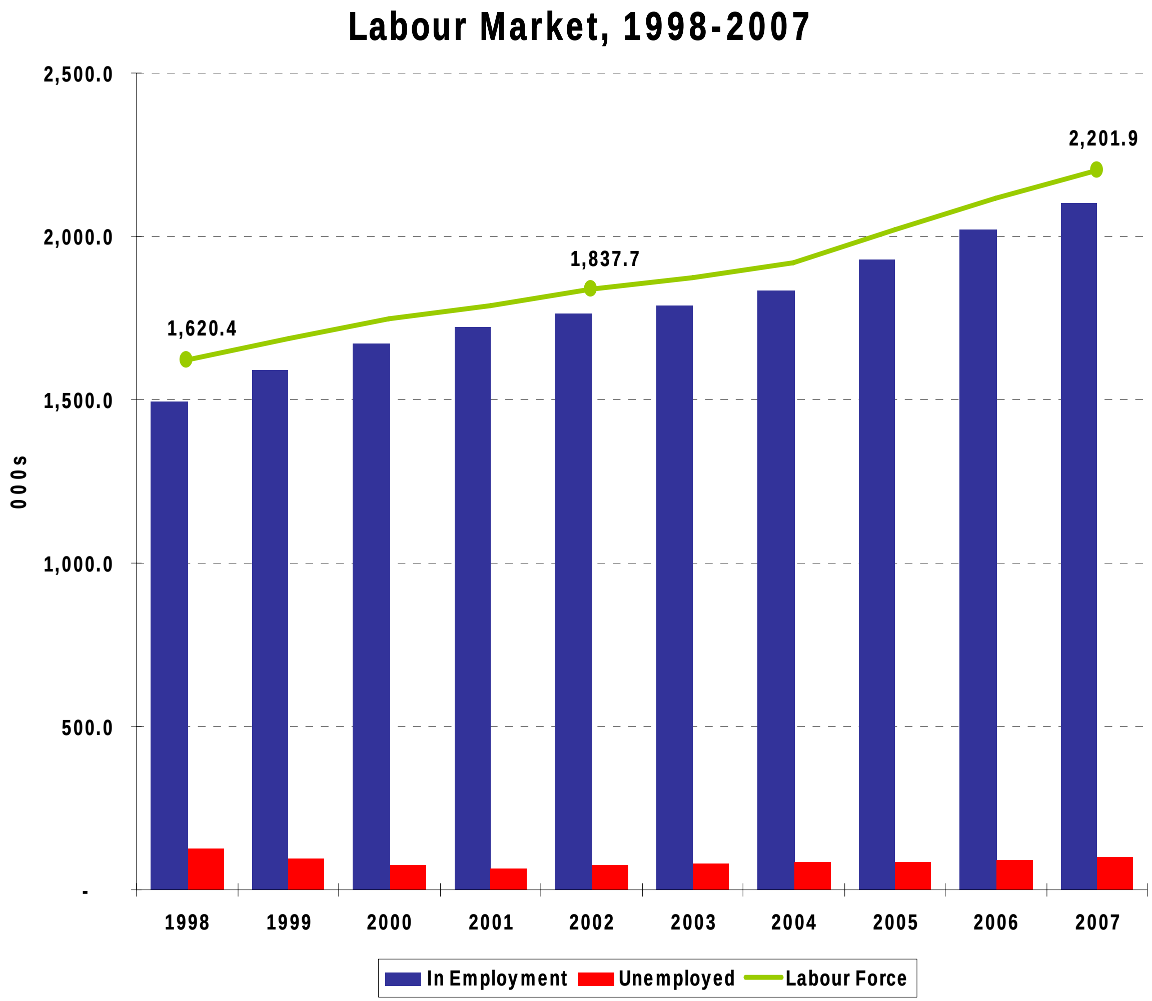
- Since 2003, the population of Ireland has grown by over 11%.
- 27% of the population was under 20 years in 2006 compared with an EU-27 average of 22% and 60% of the population was under 40 by 2008.
- Eurostat has identified the key demographic trends in the EU "towards having fewer children and having them later in life, fewer and later marriages, a higher proportion of births outside marriage and smaller households."



Source: Central Statistics Office, Eurostat

The Labour Market has expanded

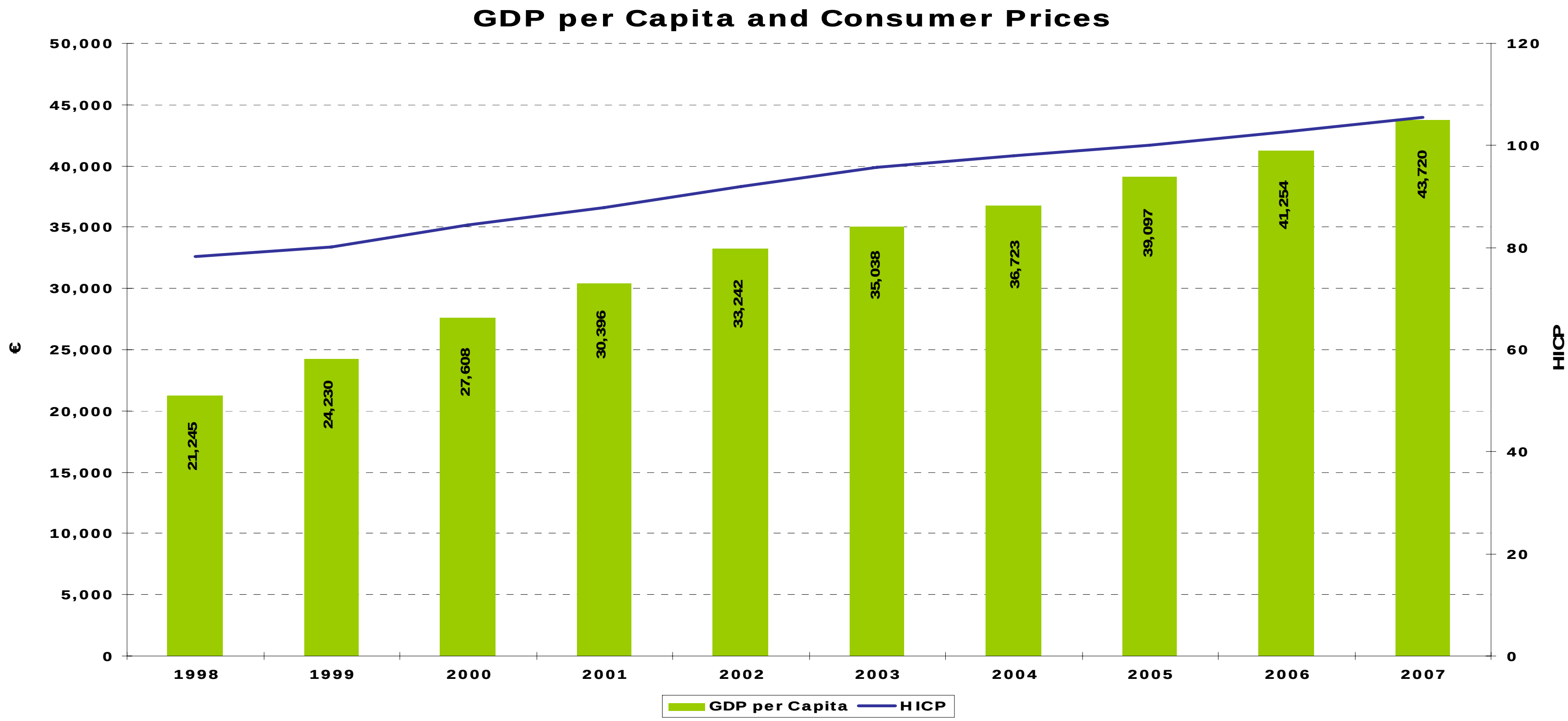
- Between 1998 and 2007 the labour force grew by 36%.
- The number of people actually in employment has increased by over 40% and the number unemployed has declined by over 20%.
- However this data does not reflect the rise in unemployment since late 2008.



Source: Central Statistics Office

While GDP per Capita has doubled since 1998

- Since 1998, Irish GDP per capita has more than doubled. This growth in income has, in turn, led to increased consumption and rising prices, shown here by the Harmonised Index of Consumer Prices (HICP).

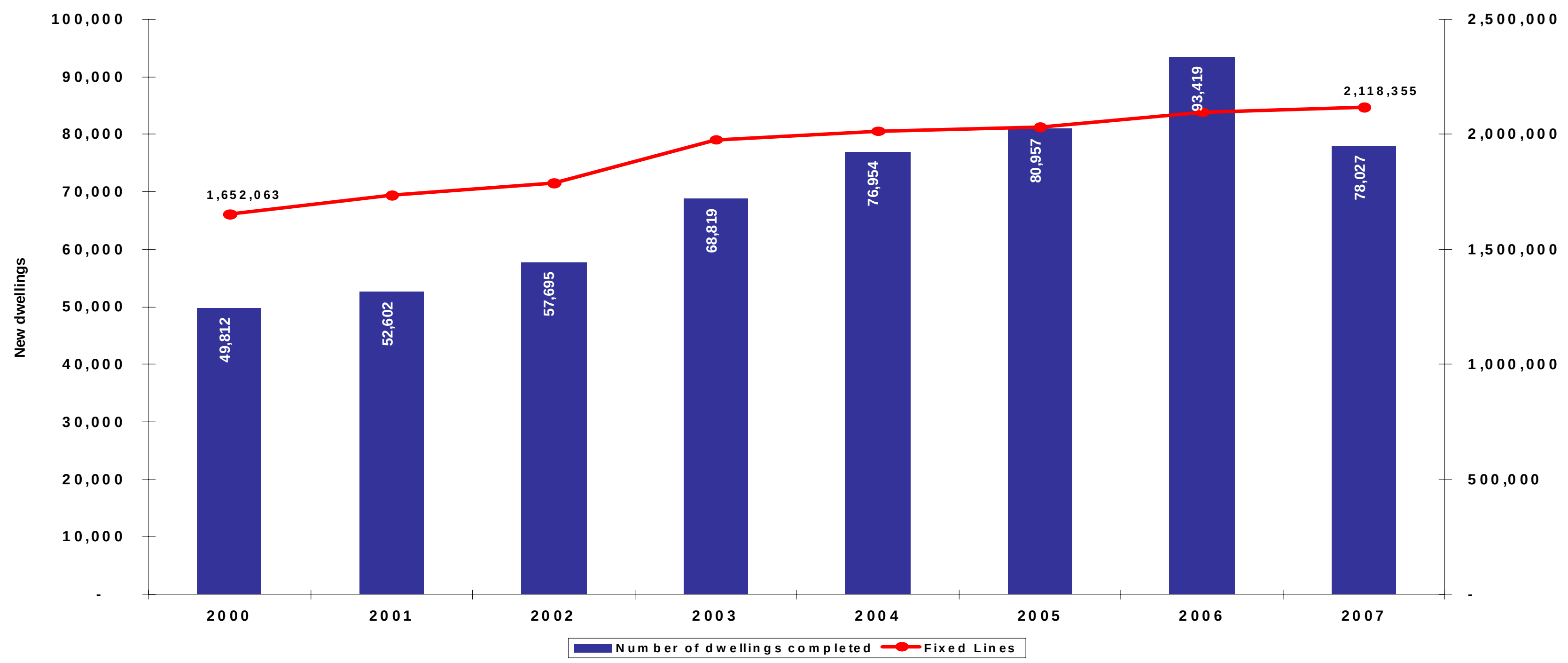


Source: Central Statistics Office

Housing stock has also increased

- Housing completions peaked in 2006. Between 2000 and 2007 the number of completions increased by around 56%. This growth in housing stock has stimulated strong demand for fixed lines in the past decade, the number of which has grown by more than 28% since 2000.

Number of dwellings completed & number of fixed lines, 2000-2007

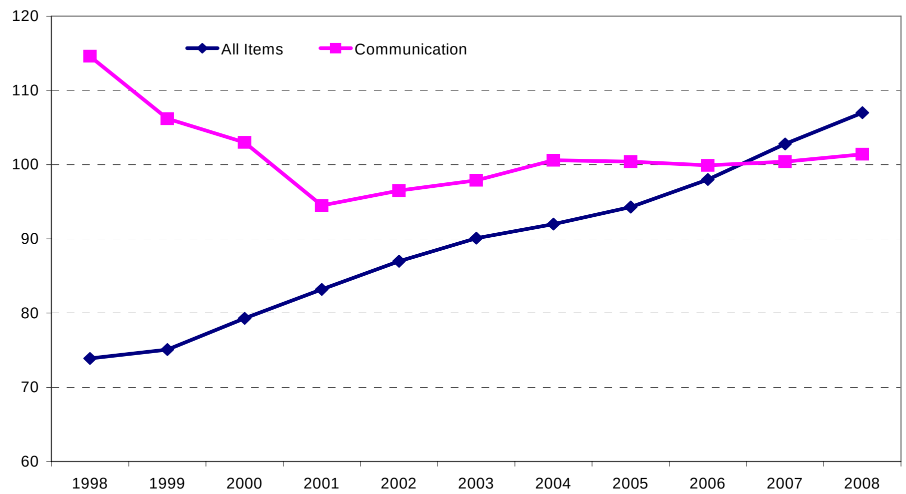


Source: Central Statistics Office

Analysis of overall prices and Communications prices

- Communications prices have declined in the same period and have been relatively flat since 2004 although they have increased by 0.7% between January 2008 and January 2009.
- The CSO applies a weight to communications costs of 3.42% of the total consumer basket of goods and services, compared with 6% for alcohol and tobacco consumption and 15.42% for hotels and restaurants. The average household spend according to the CSO in 2005 was around €787 per week, suggesting that households spend around €27 per week on postal and telecommunications services or €1,404 per annum.

Communications Component of the Consumer Price Index



Source: CSO

Note: Communications costs include post and telecoms

How has the Irish communications market changed since 1998?

- The Irish market was liberalised in December 1998 with regard to the provision of public voice telephony. In 2001 there were 23 active operators in the market while by 2008 there were over 40 providers of public voice telephony in Ireland, and operators other than eircom had a combined 22% market share of voice telephony lines.
- With regard to mobile telephony, while in 1998 there were just 2 network providers, by 2008 there were 4 extensive mobile networks in Ireland and this in turn had encouraged service providers such as Tesco Mobile, An Post and eircom Mobile to enter the Irish market.

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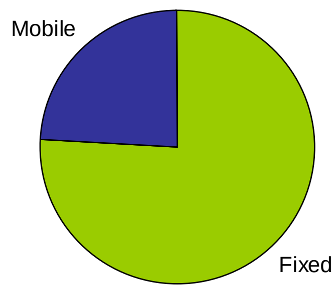
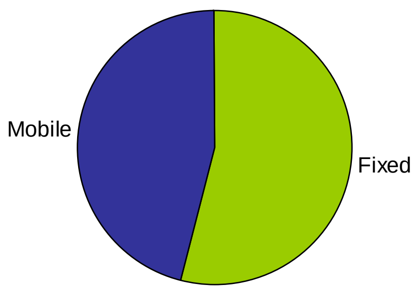
Mobile has driven growth in the Irish Electronic Communications market in the past decade

- The Irish telecoms market was worth just under €1.85bn in 1998 while by 2008 the value of this market had more than doubled to €4.4bn.
- As a proportion of total EU electronic communications revenues, the Irish market comprised 1.3% in 2008, about the same as in 1998.
- While mobile revenues comprised around 22% of total revenues in 1998, their share of total revenues had risen to 44% by 2008.

Fixed and mobile revenue proportions in 1998

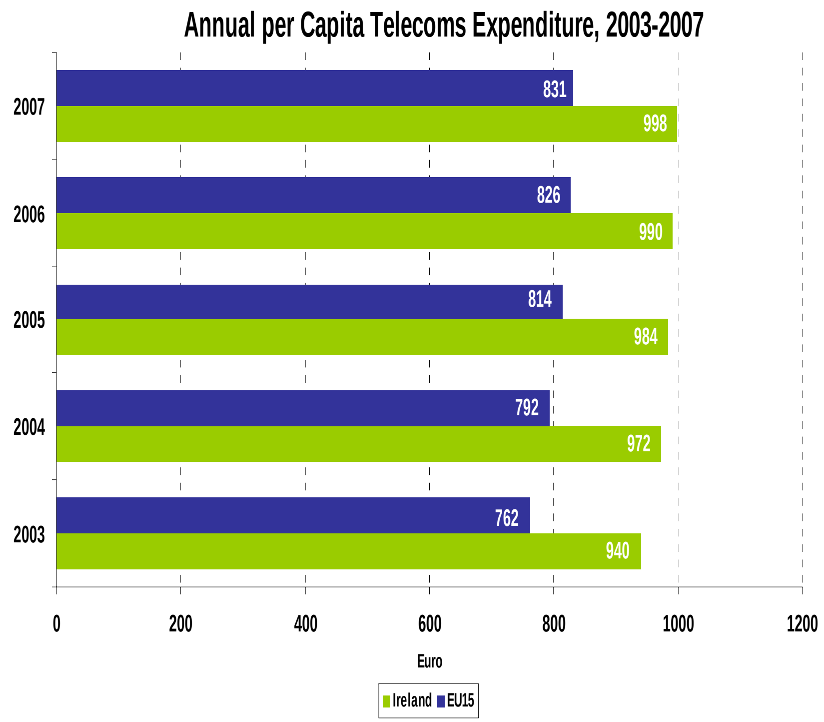


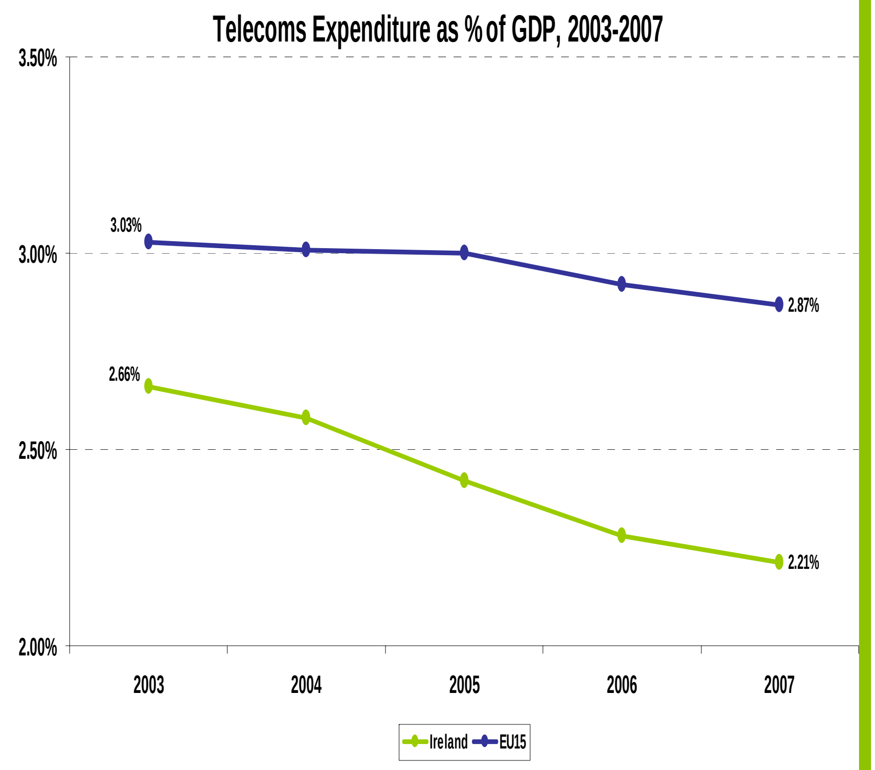
Fixed and mobile revenue proportions in 2008



Telecoms expenditure has been steady

- Irish per capita telecoms expenditure increased year-on-year between 2003 and 2007. However telecoms expenditure as % of GDP fell significantly in comparison to the EU15 in the same period, as telecoms revenues did not grow as quickly as GDP in the same period.

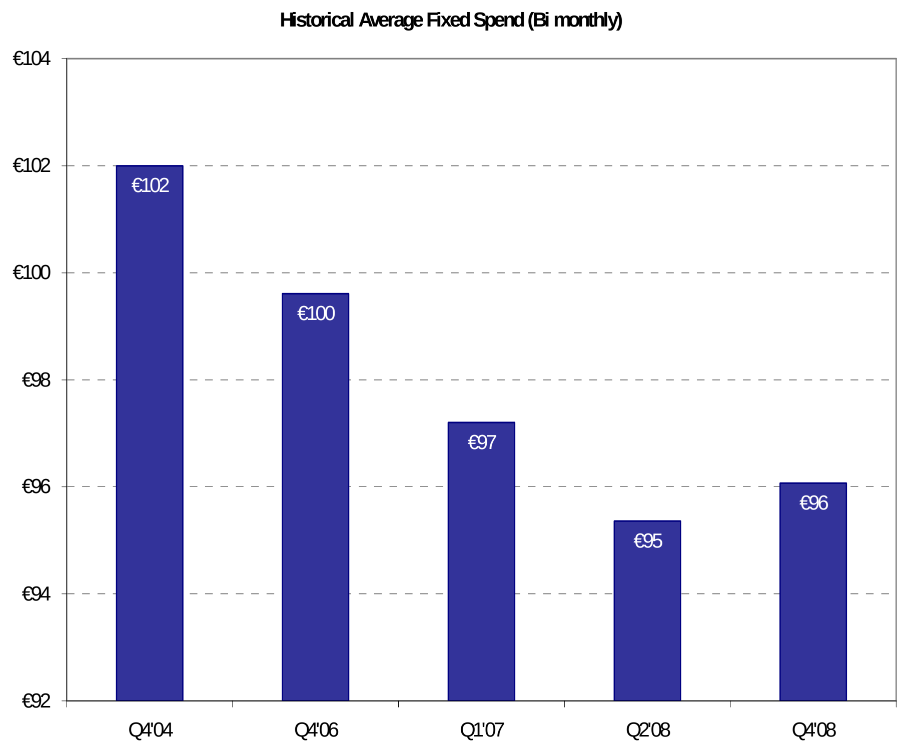




Source: European Information Technology Observatory

Average Fixed Line Spend has come down over time

Q. How much, approximately, was your last bi-monthly telephone bill from your telephone service provider(s) including VAT?



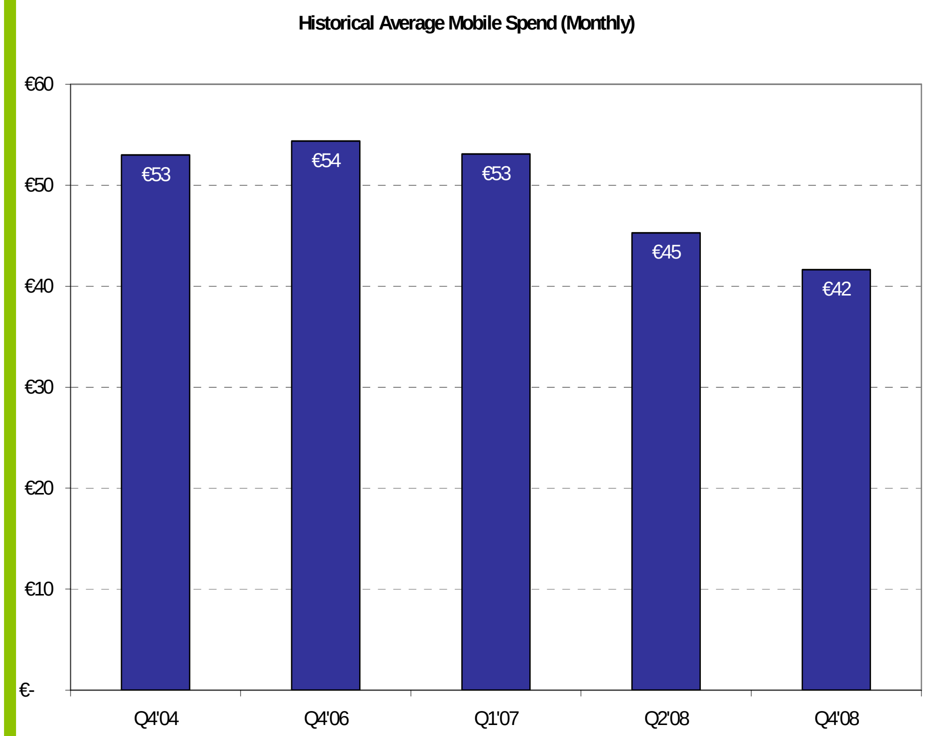
Base: All Who Have Fixed Line in Home

- **The average bi-monthly spend on fixed line telephony was €96.07. This has decreased since Q4 2004 when average bi-monthly spend was €102.**
- **Those with relatively low spend (up to €40) on fixed lines are more likely to be aged 65-74 (36%), C2DEs (17%), and the unemployed or retired (26%). Those without a PC (27%) or Internet (26%) at home also appear to spend less.**
- **Those aged 35-49 (€101), ABs (€122) and the farming community (€105) are relatively higher spenders as are those with teenage children (€111).**

Source: ComReg/MBIMS Consumer ICT Surveys 2004- 2008

as has average Mobile Spend

Q. Approximately how much do you spend per month topping up your mobile phone or on your mobile monthly bill?



- **Mobile phone spend among residential consumers decreased from €53.10 in Q1 2007 to €41.08 in Q4 2008.**
- **Monthly spend is higher among men (€45), 25-34 year olds and 35-49 year olds (€45 and €49 respectively)**
- **ABs spend an average of €54 / month, compared to €37 / month among DEs and €36 / month among the farming community.**
- **Those with a monthly subscription (or contract) spend over twice as much as Pre-Pay customers (€74 v €33).**

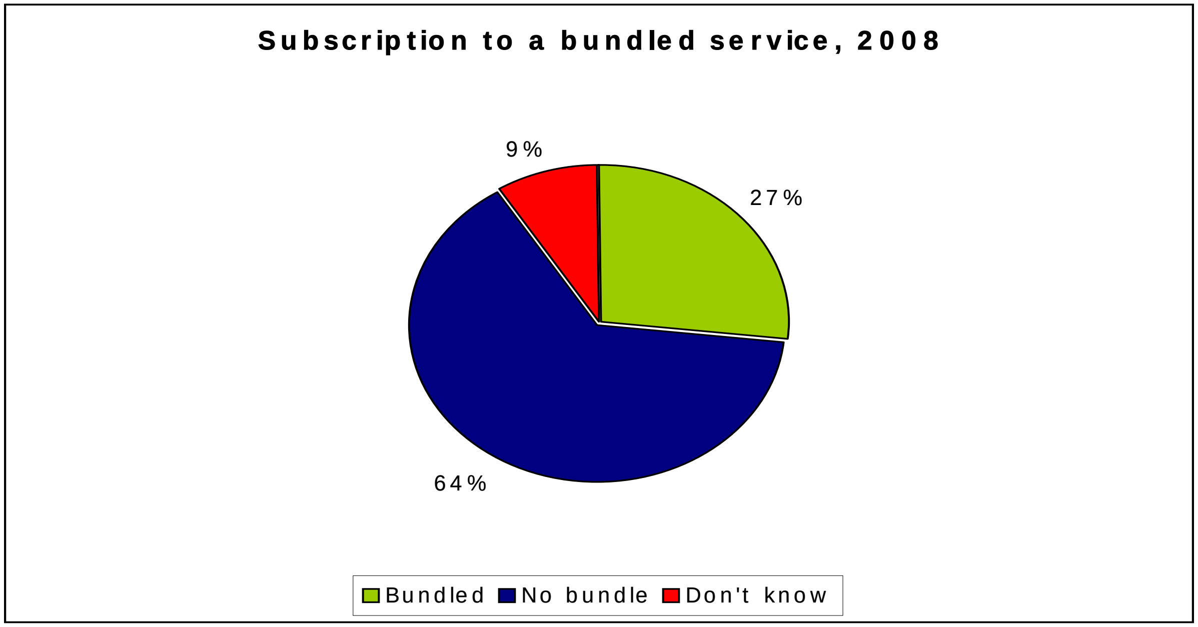
Base: All Mobile Phone Users

Source: ComReg / MBIMS Consumer ICT Surveys 2004-2008

But bundles are becoming more popular

- Bundling is growing as voice revenues fall, operators try to win customers, and new players enter the industry.
- 27% of consumers in a 2008 survey stated that they buy two or more communication services as part of a bundle.

Q. Do you subscribe to a bundled package from your service provider?



How has consumption of telecommunications services changed since 1998?

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- **Now we will turn our attention to more detailed analysis of consumers' attitudes to, and usage of, communications products and services over the past decade:**
  - Internet and broadband
  - Mobile telephony
  - Fixed line telephony
  - Broadcasting
- **ComReg, in association with a number of research agencies, has conducted annual consumer surveys on ICT usage over the last decade, seeking answers to general questions like:**
  - What impact does ICT have on consumers?
  - What value do consumers place on communications technologies?
  - How much do consumers spend on their ICT usage?
  - What future ICT intentions do consumers have?

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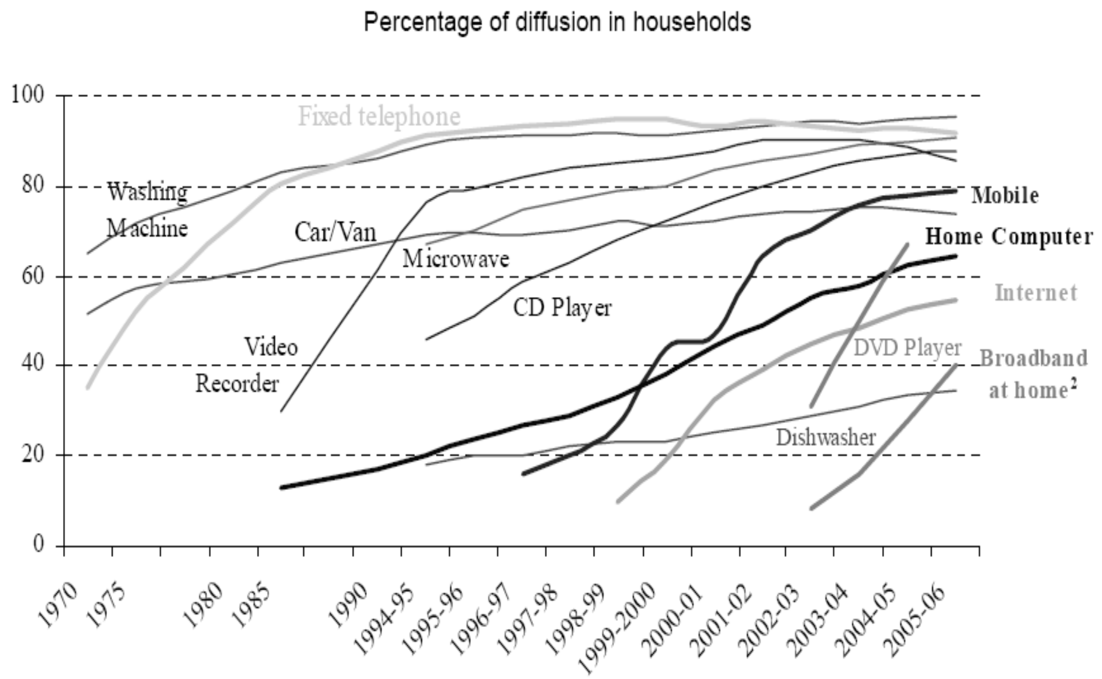
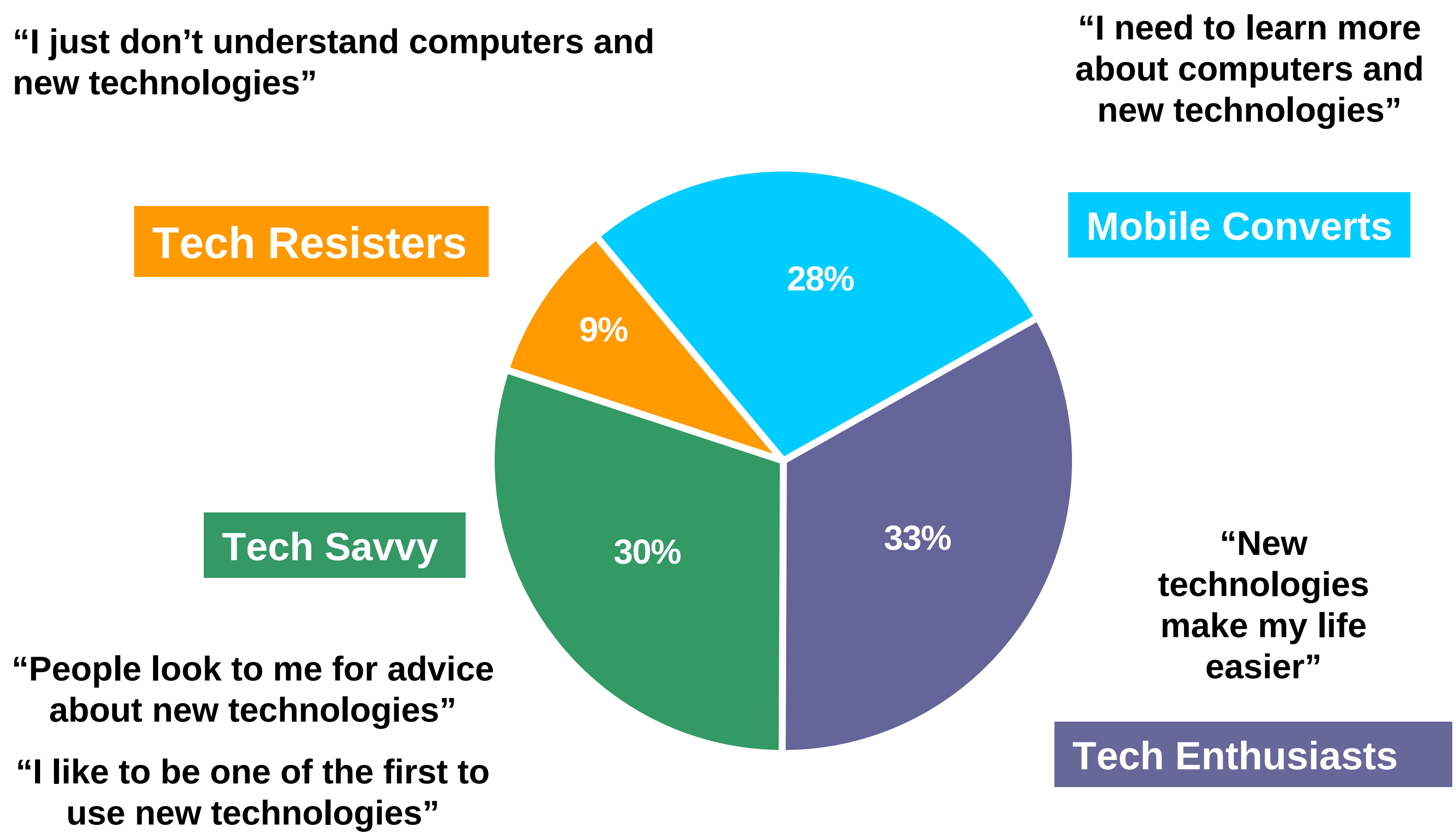
Consumer adoption of technology is not uniform



At a general level, specific technologies are adopted by consumers over varying periods of time. The chart below illustrates the typical times for adoption of a range of technologies from washing machines to broadband by consumers in the UK.

Diffusion of technology in the UK

ComReg's recent research on Consumer segments in terms of usage of communications technology



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The Technology Outlook of each Segment

"It's like when I come home from work ..the first thing I do is turn on the laptop then turn on the kettle, technology is just a part of who we are" (Tech Savvy)

"you are penalised if you don't have technology, but for those new technologies you just hang back and have a wait and see attitude" (Tech Enthusiasts)

"Things are changing every hour now, not to mind every month, things are moving so quickly, it is taking over our children's lives. it's just hard to keep up" (Mobile Converts)

"They are trying to drag us kicking and screaming into the 21st century" (Tech Resisters)

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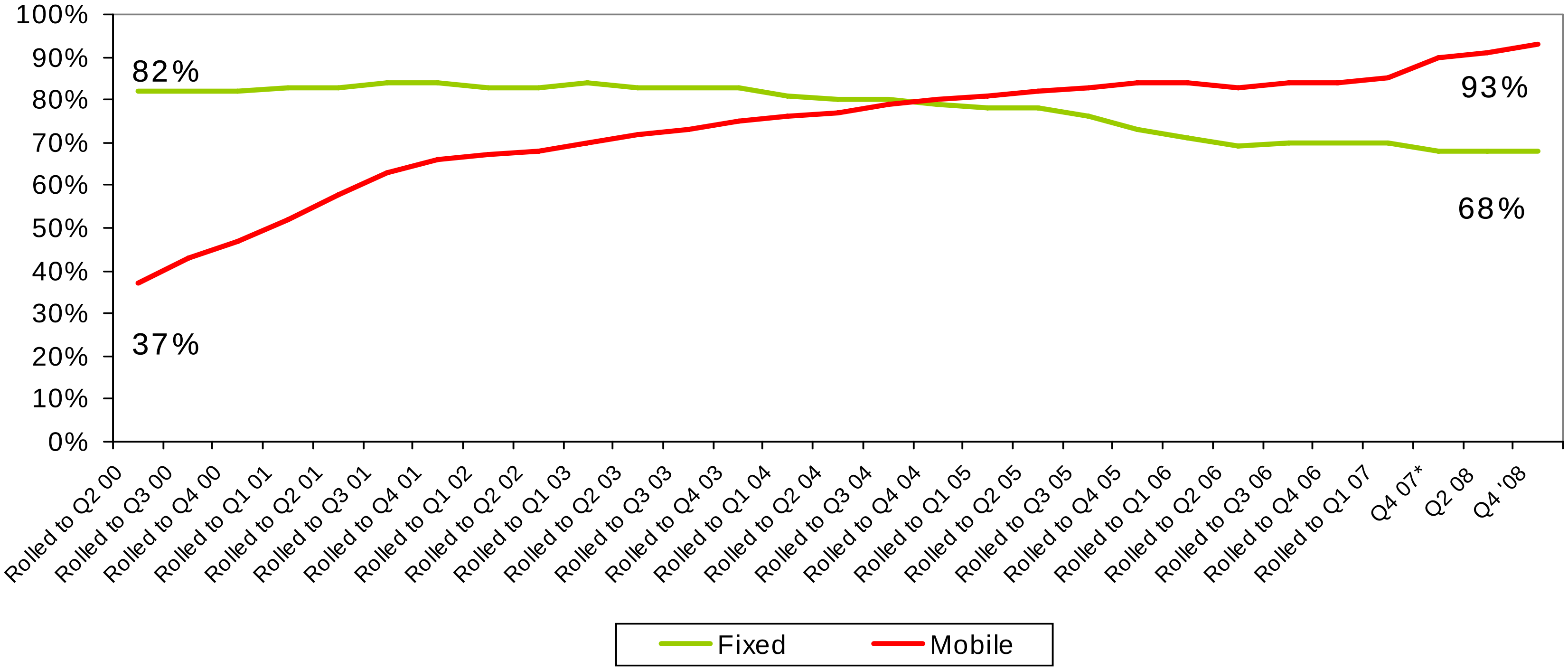
Fixed and Mobile phone penetration, 2000-2008

Q. Do you have a residential fixed line phone in your home?
Q. Do you personally own a mobile phone?



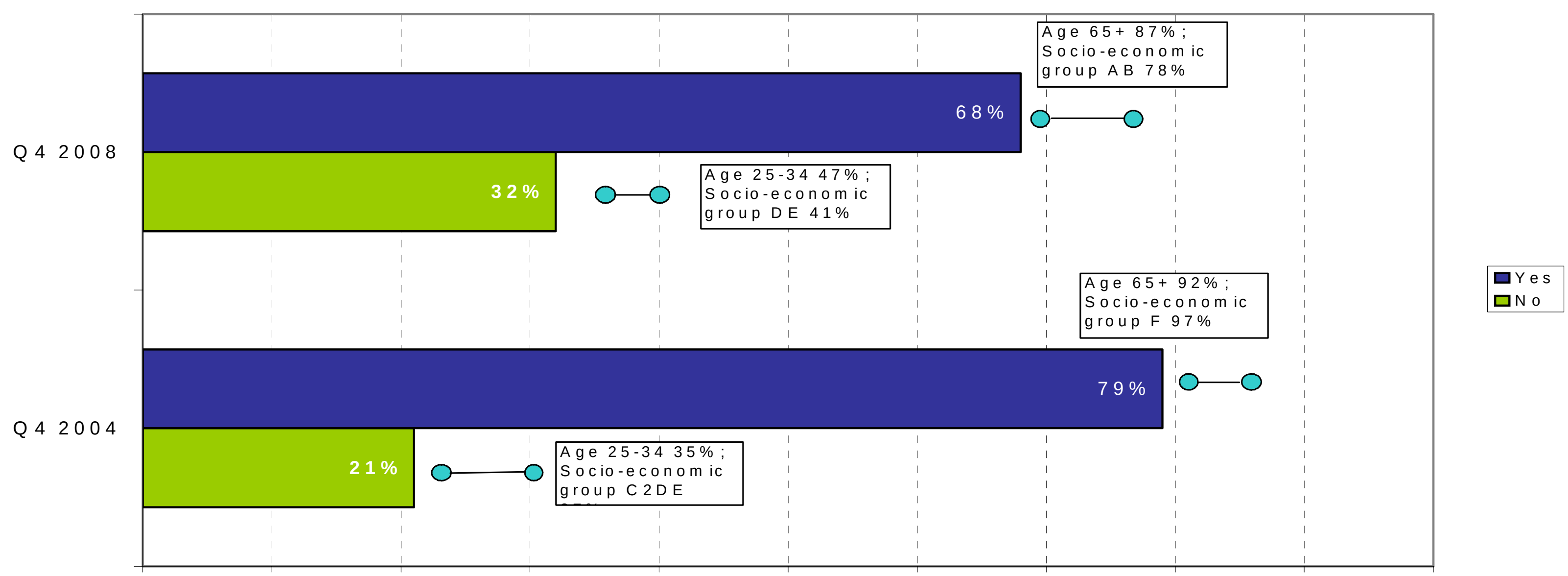
The introduction of mobile pre-paid services in 1997 was undoubtedly the spur to mass market penetration of the mobile phone. Total subscriptions doubled from around 545,000 in 1997 to almost 1 million subscriptions in 1998.

Note: From Q4 '07 Data is not rolling data, due to gap in research in 2007

Is there a typical fixed phone user?

- **Older age categories have the highest rates of fixed phone ownership though this has declined somewhat over the last number of years. Lower socio-economic groups are less likely to own a fixed line than wealthier socio-economic groups.**

Percentage Profile of Fixed Phone Owners

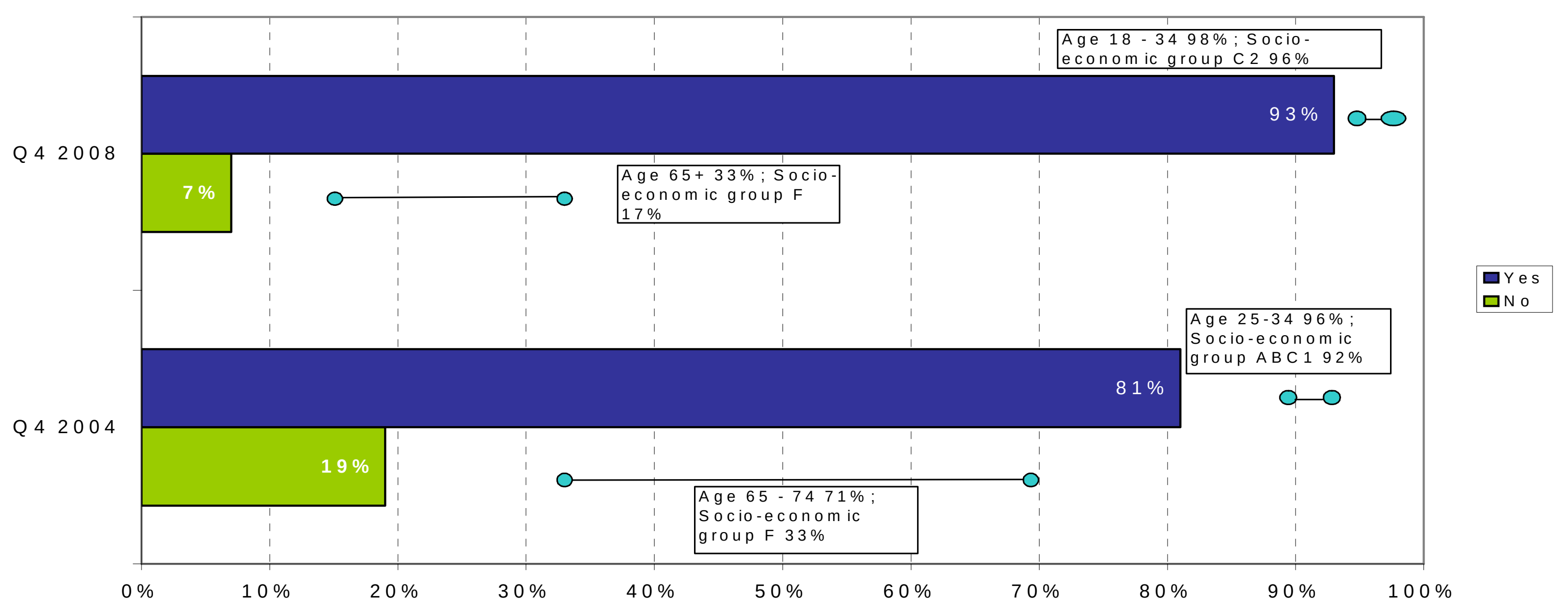


Source: ComReg/MBIMS Consumer ICT Survey Q4 2008; ComReg/Amarach Consumer ICT Survey

Base: n=1,007;1,047

Is there a typical mobile phone user?

- **Mobile phone ownership is highest among younger age groups and wealthier socio-economic groups. The CSO's 2005 Household Budget Survey found that over 91% of households in the highest income quintile (ie gross weekly income in excess of €1,524.57) reported having at least one mobile phone, which was over twice as many as households in the lowest income quintile (gross weekly income less than €312.23).**



Source: ComReg/MBIMS Consumer ICT Survey Q4 2008; ComReg/Amarach Consumer ICT Survey Q4 2004

Base: n=1,007;1,047

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Mobile phone usage has had an impact on landline access (access substitution)

- **Having a mobile phone continues to be the main reason for not having a fixed line at home. This reason was cited by 50% of respondents in 2004 and 80% in 2008.**
- **This was most likely to be cited by those in rented accommodation (84% in 2008).**

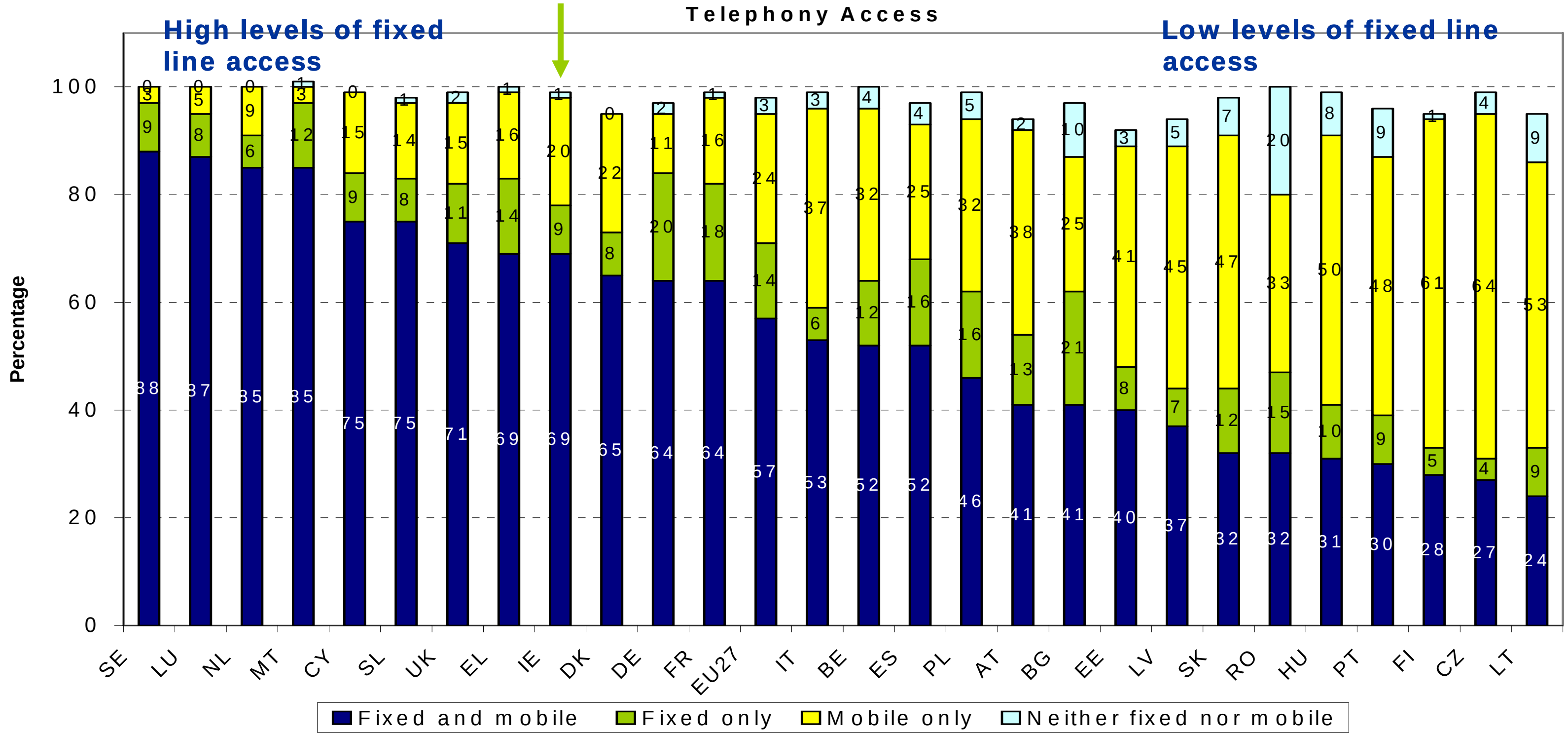
Q4 2004	
Have a current mobile subscription	50
Fixed line call costs are too high	13
Cost of connection and line rental too high	12
Easy Access Elsewhere	3
Still waiting for installation/connection	3
Plan to get a fixed line in next 6 months	2
Other	12
Don't know	6

Q1 2008	
Have a mobile phone which you use instead	80
Fixed line call costs are too high	8
Cost of connection and line rental is too high	5
Plan to get a fixed line	2
Easy access elsewhere e.g. payphone nearby,	1
Still waiting for installation/ connection	2
Other	5
Dont Know/Not stated	2

Source: ComReg; AmarachQ4 2004 Consumer ICT Survey; MBIMS Consumer ICT Survey Q1 2008

Mobile-only household levels vary across Europe

Cord-cutting, i.e. where a householder drops a fixed line in favour of a mobile phone, is a growing trend in Ireland and in the EU, ranging from 1 in 5 consumers in Ireland to 1 in 2 consumers in Lithuania.



Source: e-communications Household Survey, June 2008

Mobile phone usage has also had an impact on landline usage (usage substitution)

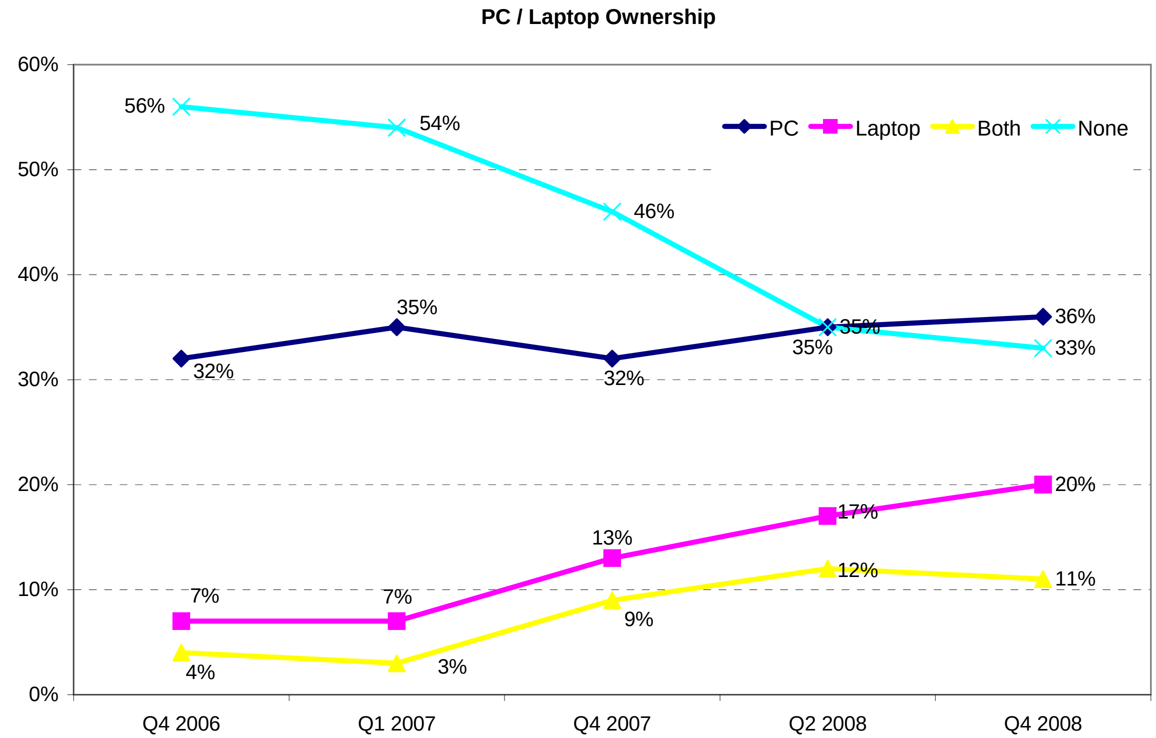
- **Quality of reception and convenience are the two most important factors cited by consumers in determining whether to use a fixed line or mobile phone.**
- **Therefore the cost of the call appears to be less important to consumers than reception quality and convenience.**

When making a call, how important are the following factors in determining whether to use a fixed line/mobile telephone?	Important %	Unimportant %
Price of the call	**67%**	**11%**
Quality of reception	**80%**	**5%**
Convenience	**75%**	**6%**
Time of day the call is made	**54%**	**21%**

(n = 676 Has a residential Fixed line phone), Q4 2006

Computer ownership has increased, stimulated by falls in prices particularly of laptops

Q. Do you have a Personal Computer (PC) in your house (including laptops that you usually have at home)?



Source: ComReg/MBIMS Consumer ICT Survey Q4 2008; Q4 2006

Laptop and PC – 11% Higher Among

35-49	15%
ABs	25%
Students	16%
Living in Dublin	20%
With Children 14%	
Fixed Line	14%
Home Internet Access	18%

Laptop Only – 20% Higher Among

15-24	33%
ABs	26%
Students	36%
No Fixed Line 24%	
Broadband Con.	30%

PC Only – 36% Higher Among

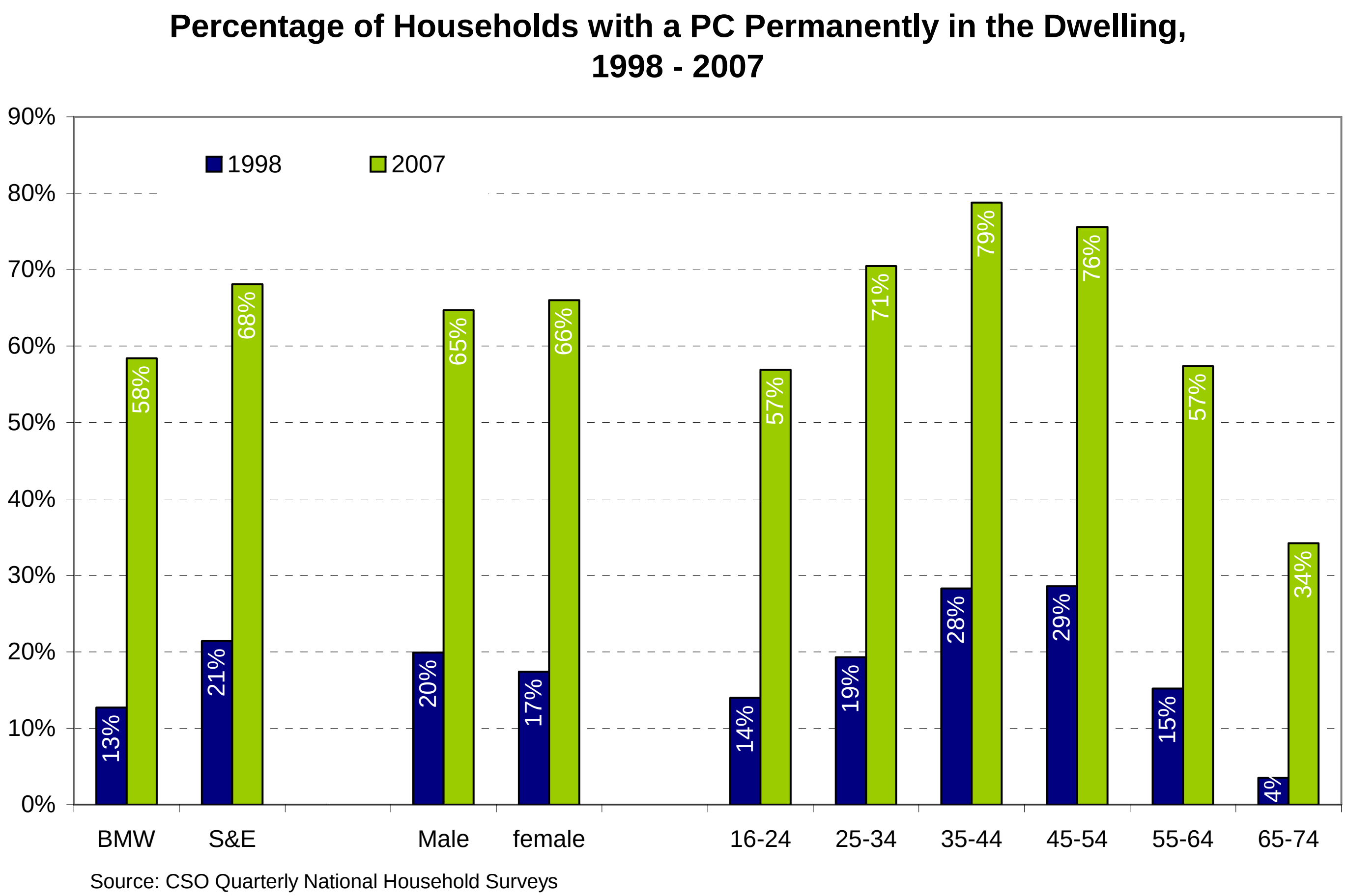
Males	39%
35-49	44%
Employed	40%
Fixed Line	45%
Narrowband Con.	58%

None – 33% Higher Among

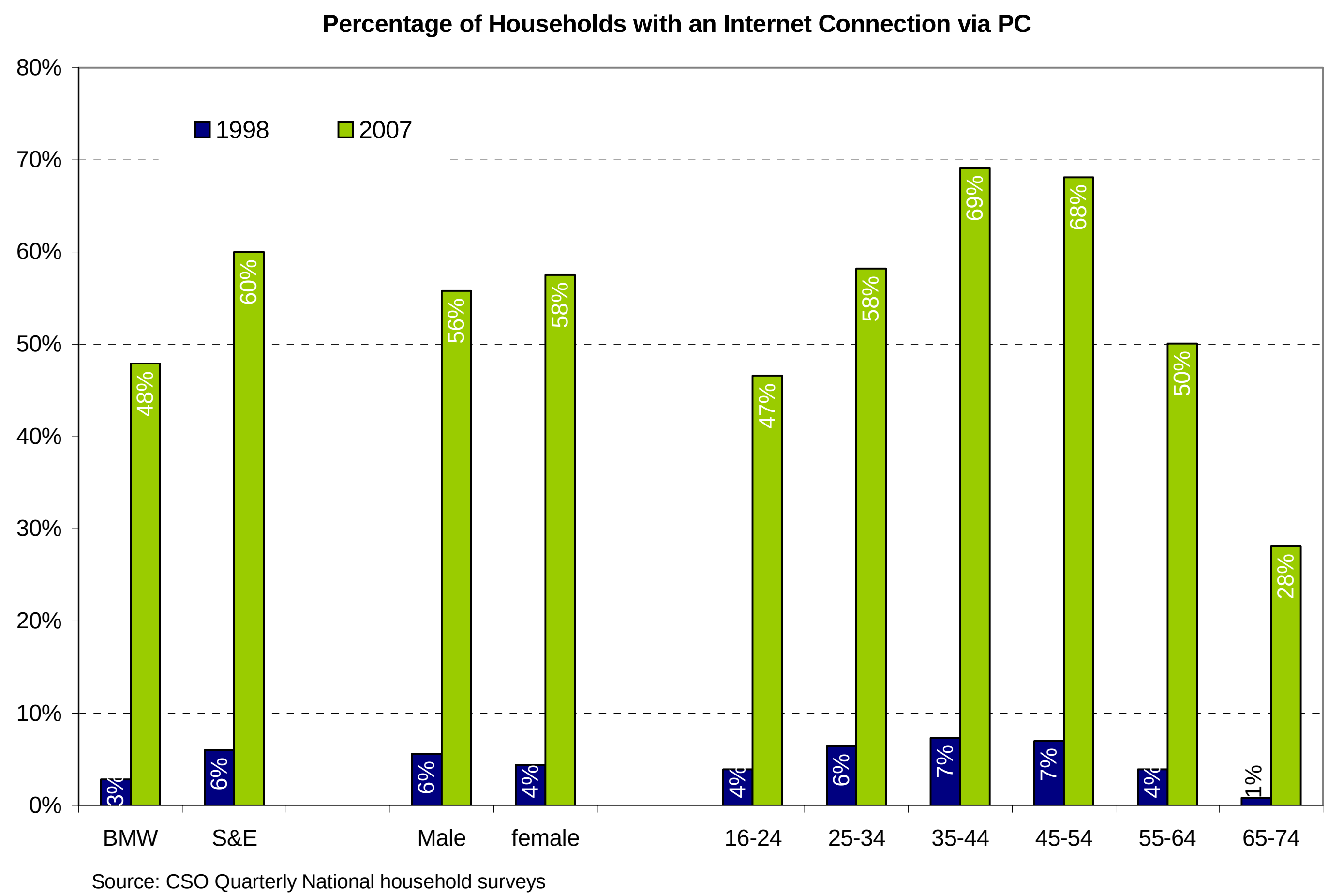
65-74	70%
Fs	52%
Conn/Ulster	43%
Rural	42%

Base: n=1,002 (all respondents)

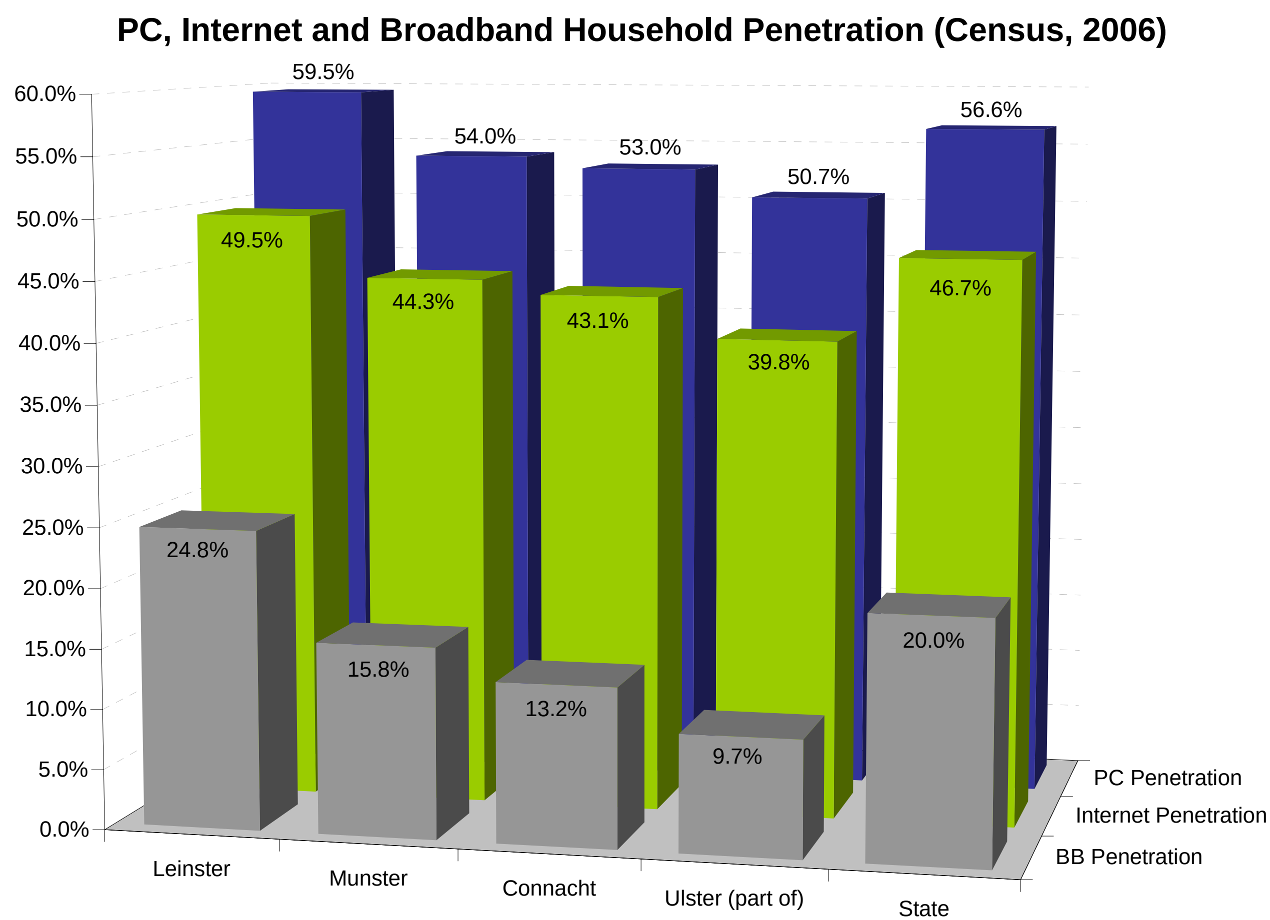
PC penetration levels vary according to age in particular



As does household Internet penetration

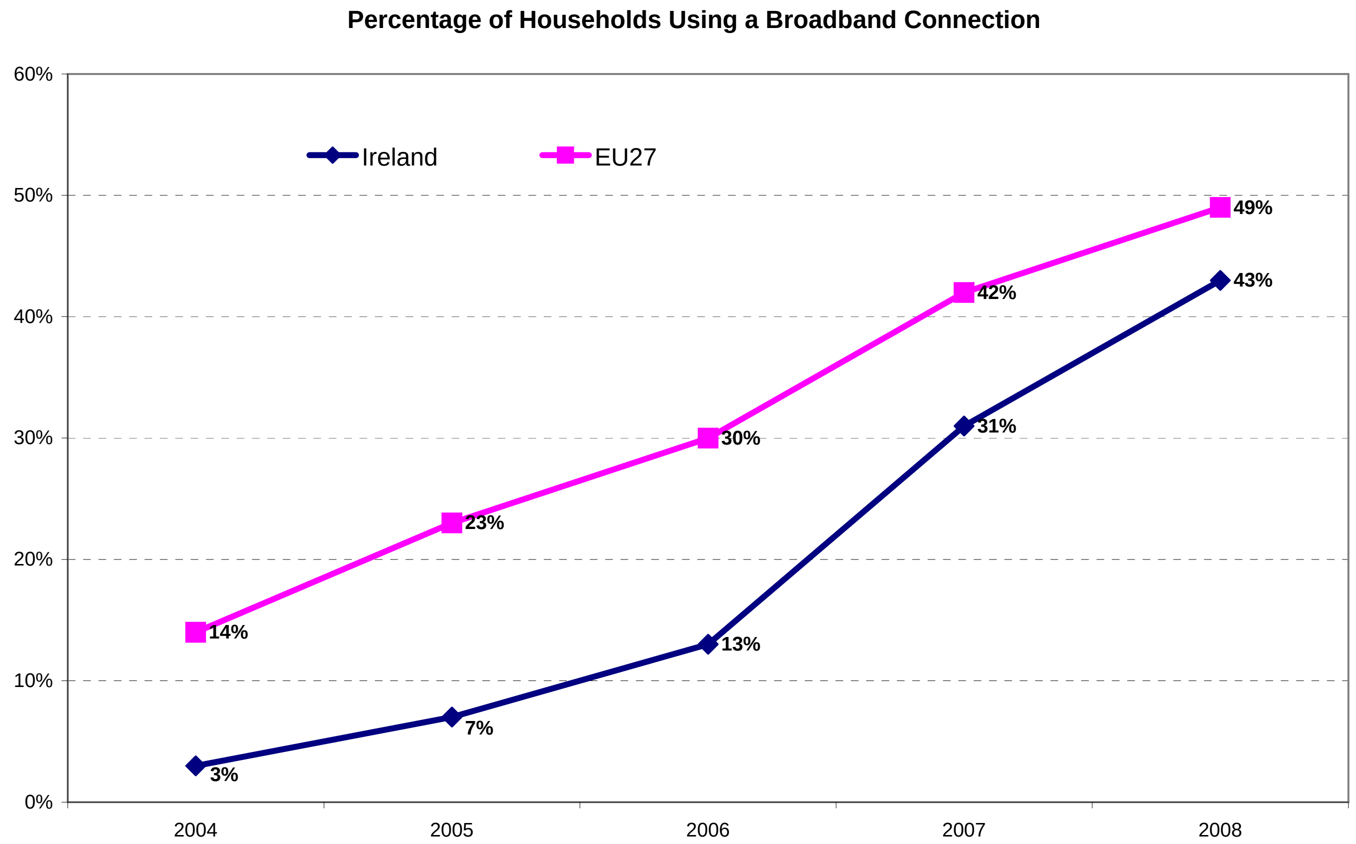


Regional differences also exist with regard to penetration of PCs, internet and broadband



Source: Census, CSO, 2006

Households are using broadband in greater numbers



Source: Eurostat

How does Internet usage in Ireland compare with users elsewhere?

Country	Average Hours per Visitor	Average Pages per Visitor
Europe	*23.3*	*2,665*
United Kingdom	28.5	2,836
Spain	25.1	2,218
Netherlands	23.4	2,884
France	23.3	2,544
Germany	23.2	2,906
Sweden	21.7	2,901
Finland	20.0	2,644
Belgium	19.9	2,343
Norway	19.9	2,480
Portugal	19.8	2,393
Switzerland	19.0	2,176
Italy	18.8	1,971
Denmark	16.8	2,406
Austria	16.0	2,078
Russia	16.0	2,091
Ireland	14.6	1,536

- ComReg's most recent survey in late 2008 found that the average consumer spends 10 hours per week online.
- Those most likely to use the Internet frequently are men (11 hours/week), 25-34 year olds (11 hours/week), ABs (12), Dublin-based (12) and those living in rented accommodation (12 hours/week).
- According to research by comScore, on average, Irish users access the internet just less than 15 hours per week.
- The chart opposite shows how average usage in Ireland compares to other European countries.

Source: comScore World Metrix, August 2008

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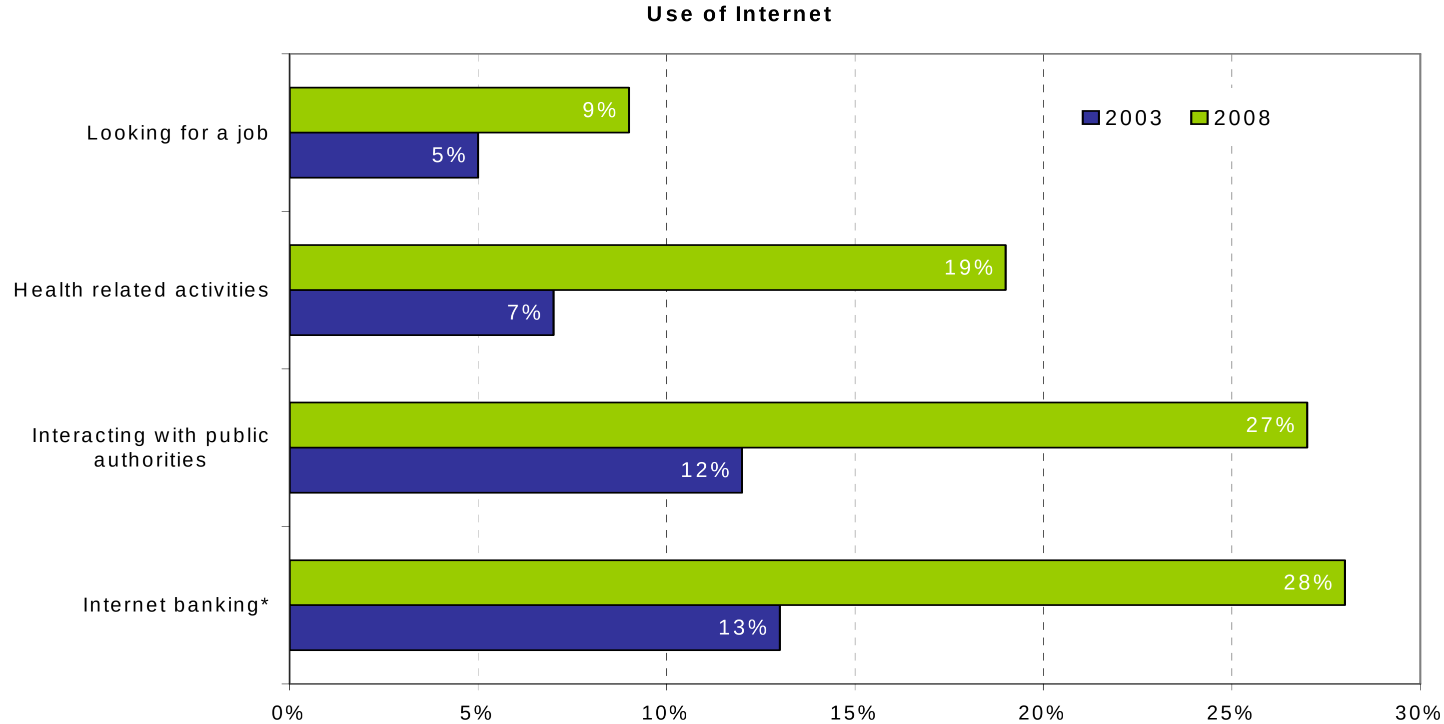
What do consumers in Ireland do on the Internet?

- This chart shows that from banking and searching for a job to searching for health information online, internet use has risen substantially over the last number of years.



Source: CSO QNHS June 2003; Eurostat Newsrelease Decmeber 2008
*2003 includes purchaisng, selling or banking

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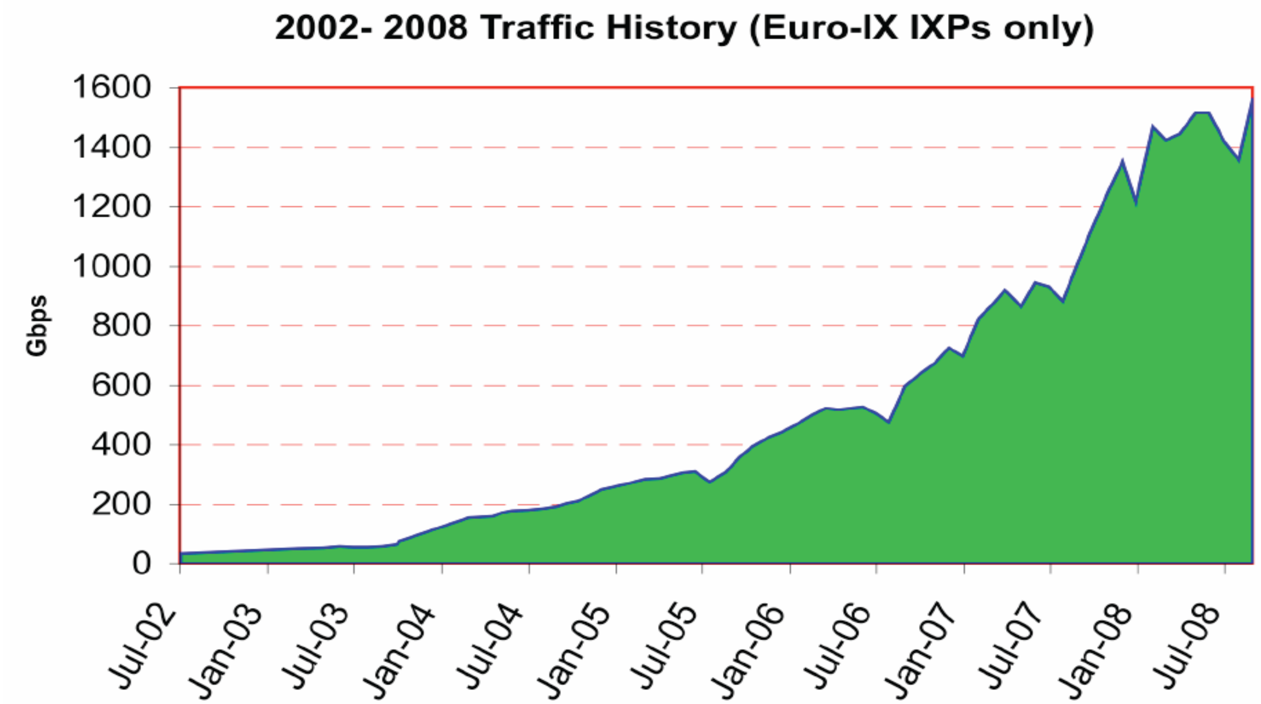
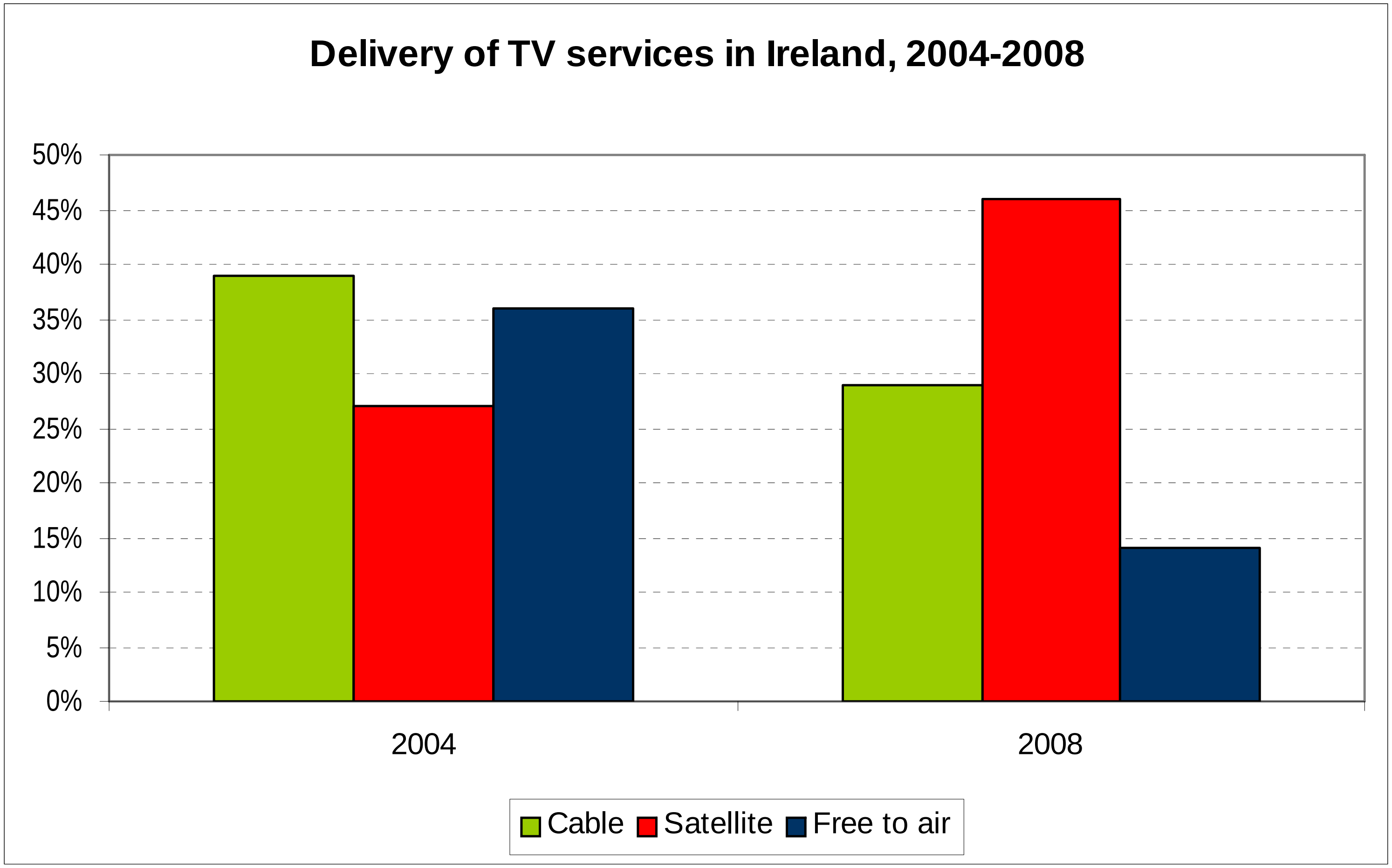
Growing bandwidth consumption is driven by strong adoption of broadband and content such as video



Source: Euro-IX

Internet traffic has grown substantially over time. The Yankee Group projects that by 2011, the average consumer will be consuming 20 GB per month or about 400 times the 500 MB per month the average consumer uses today.

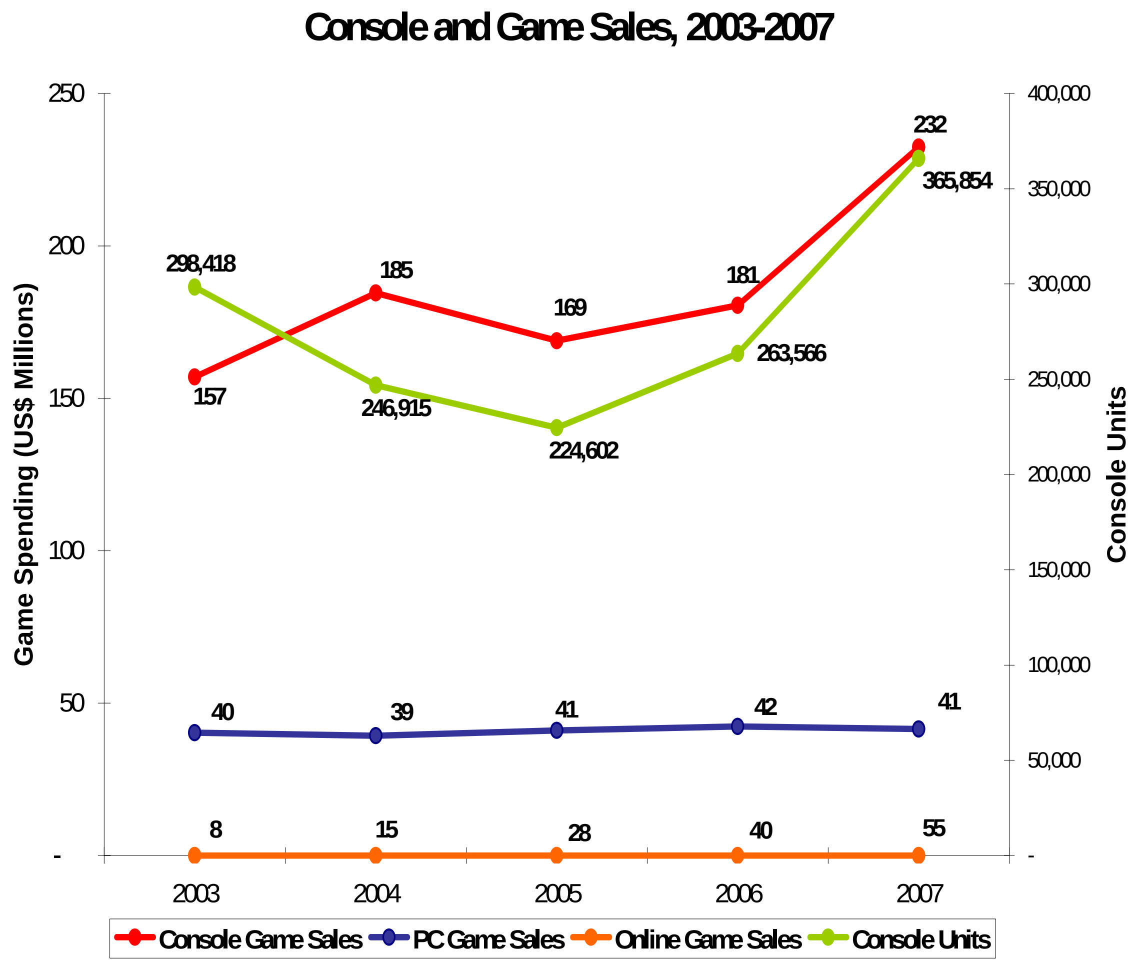
TV viewing has migrated to digital platforms over time



Source: MBIMS/ComReg Consumer ICT Survey Q4 2008;
Amarach Q1 2005, Base: all with TV at home

Console and Game Spend is relatively strong

- The CSO's Household Budget Survey reported that 29.2% of households had a games console in 2005. Equivalent penetration in the US was around 40%.
- The Nintendo DS was not available in Ireland until 2005 and the Wii was launched in 2007; therefore it is probable that games console penetration has increased substantially since 2005.



Source: PricewaterhouseCoopers Global Entertainment and Media Outlook

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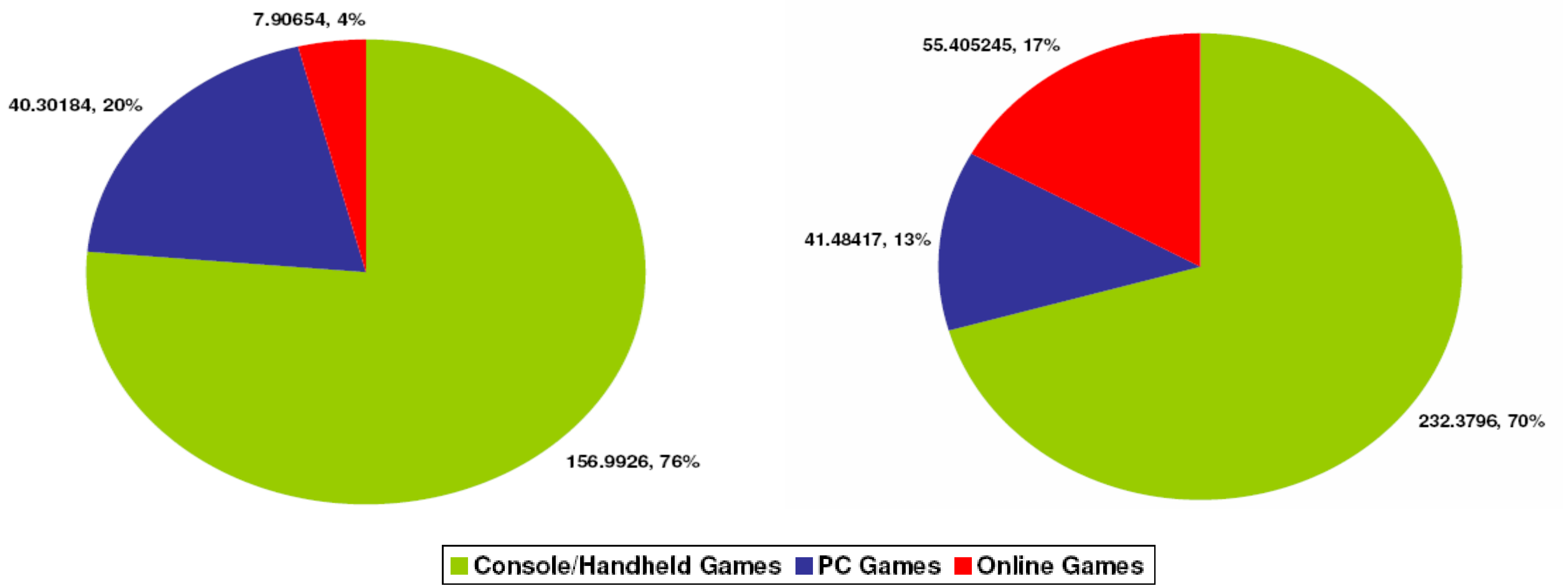
And there is evidence of increased online gaming

Games Spending (US$ Millions) 2003

Games Spending (US$ Millions) 2007



- Consumer spending on Consoles and games has grown from €159m ($205m) in 2003 to €247m or €56 per capita in 2007 and online gaming has grown its share of this market to 17% (4% in 2003). Growing broadband adoption has undoubtedly been a factor in the rise of online gaming.

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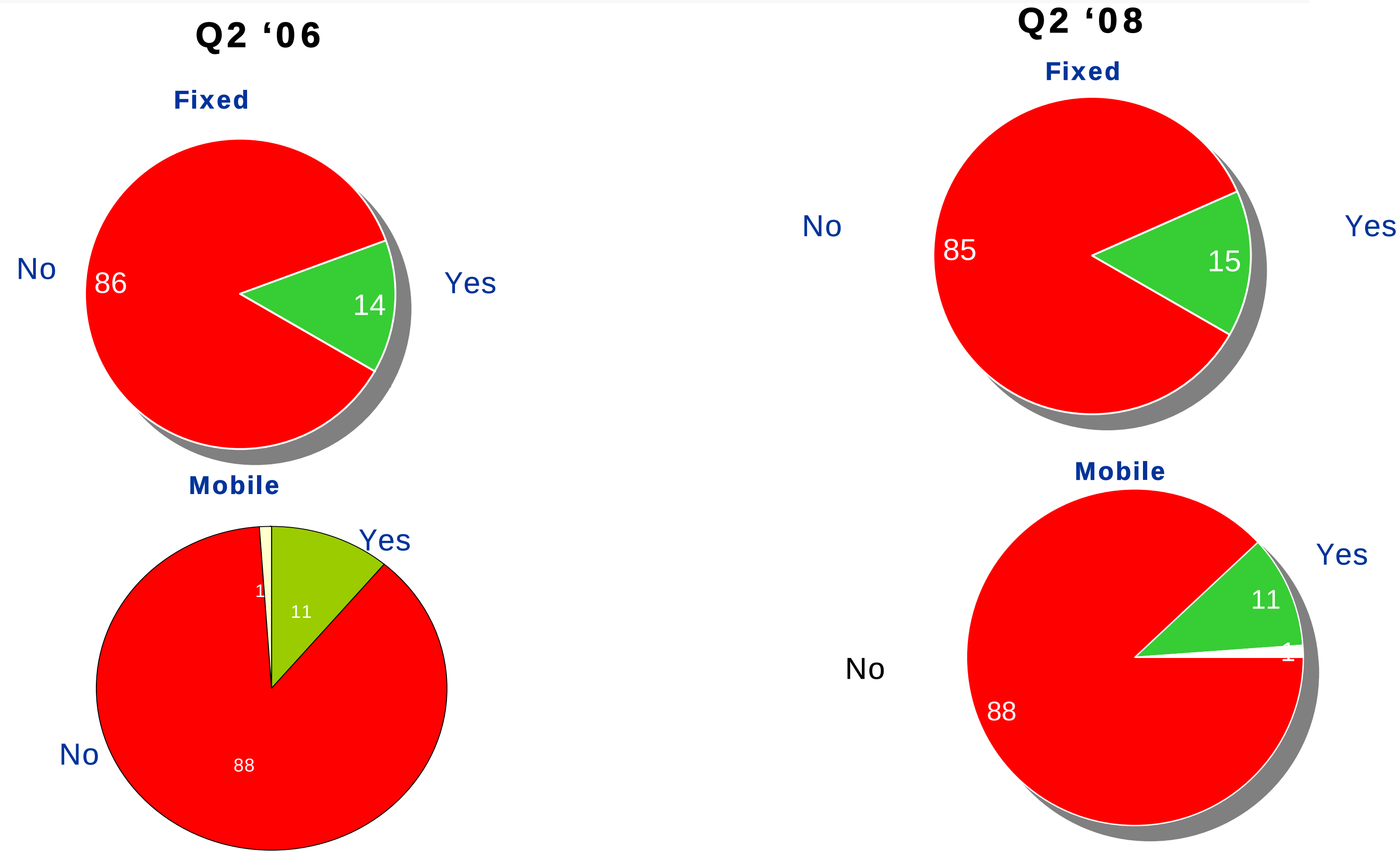
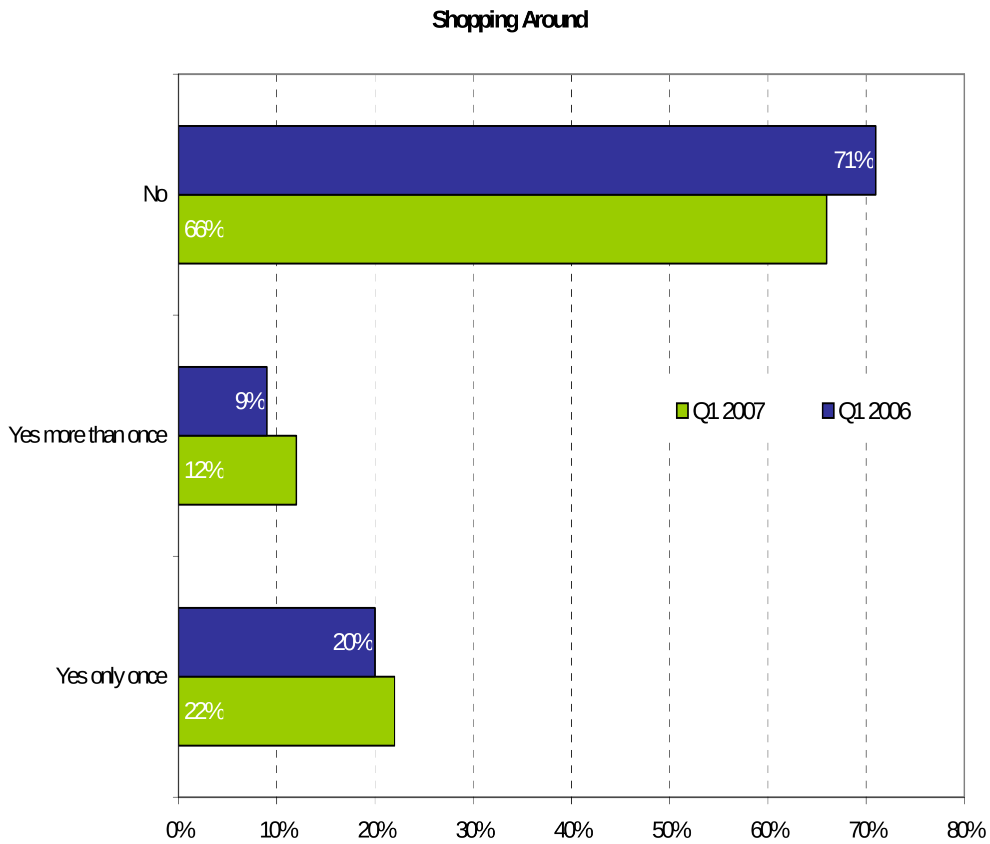
Consumer behaviour: Switching fixed and mobile phone supplier

Q. Have you switched your fixed line home phone supplier in the past twelve months?
Q. Have you switched mobile operator in the past twelve months?



Source: ComReg; MBIMS Consumer ICT Survey Q1 2008; Q2 2006 survey

However 1 in 3 consumers says that they shop around



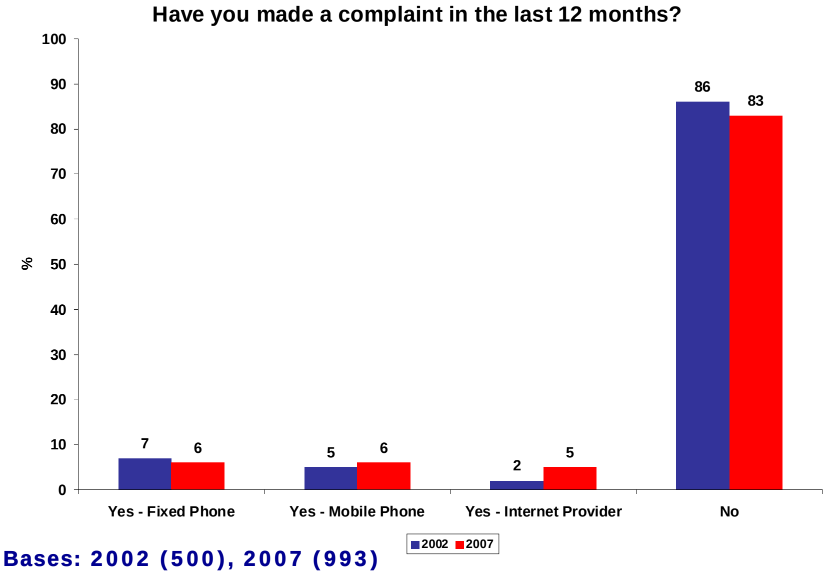
Source: MBIMS consumer ICT Surveys, 2006, 2007

% Shopped Around – Q1 2007

All Fixed line Users	34%
Male	32%
Female	35%
15-24 year olds	13%
25-44 year olds	44%
45-64 year olds	40%
65-74 year olds	18%
Higher Income Groups	40%
Lower Income Groups	28%

Base: n=673; 696

While less than one in ten consumers lodges a complaint with their provider



Bases: 2002 (500), 2007 (993)
Source: ComReg, Millward Brown IMS

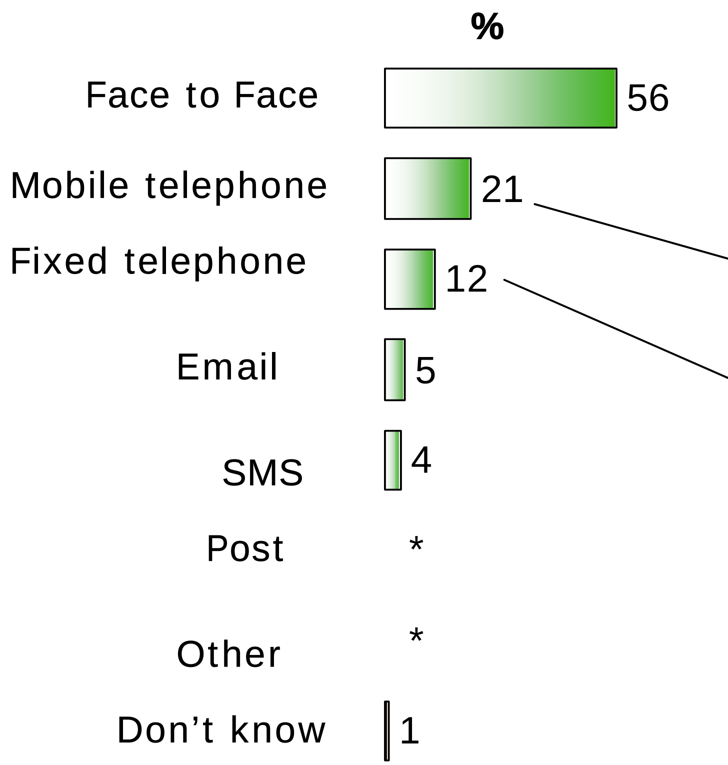
	Sector	2007 Average% Any Complaints (among those shopping in each type of outlet)
1	Clothing & Footwear Retailers	20%
2	Supermarkets	17%
3	Restaurants & Hotels	13%
4	Furniture & Appliances Retailers	12%
5	Phone & Internet Companies	10%
6	Travel Agents	8%
7	Builders & Related Services	7%
8	Car Dealers	6%
9	Pubs	7%
10	Banking & Insurance Providers	6%

Source: Amárach Research for NCA, March 2008

- Of those surveyed, the percentage that has actually complained was small in 2002 and has not changed much in more recent surveys.
- NCA research in 2008 also found that 91% of consumers had never made a complaint about their telecommunications provider.
- We can say that there is generally a low incidence of complaints made against communication operators, based on this survey data.

Face to face is still the preferred method of communication

Q. Which one of the following methods of communication do you generally prefer to use?



Higher Among	
50-64	70%
65-74	71%
F	75%
Rural	62%
No Internet Access	63%
No Home PC	65%

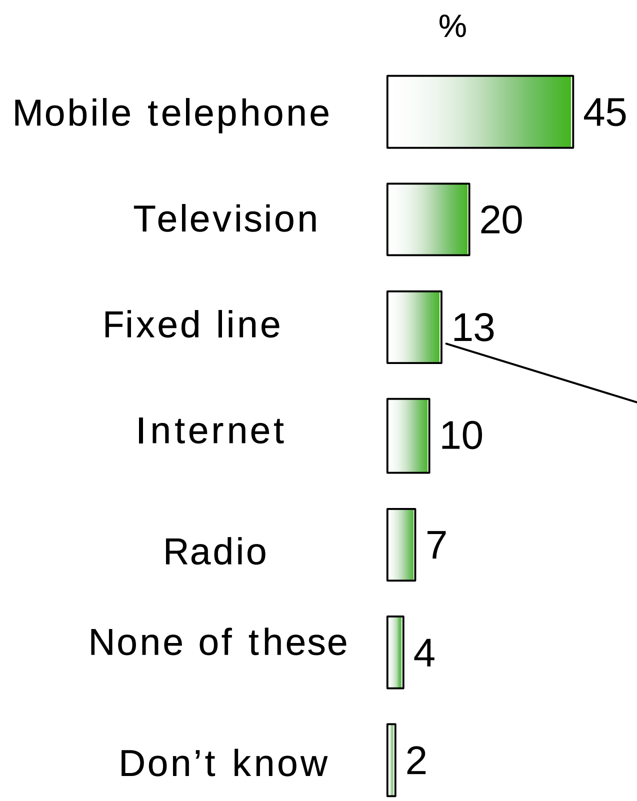
Higher Among	
15-24	33%
Students	30%
Dublin	29%
No fixed line	27%

Higher Among	
65-74	24%
AB	18%
Homemaker	20%

- **Of the communications technologies chosen, the mobile phone is the preferred technology with about one in five people preferring this as their main method of communicating.**

Base: All Respondents (n=1002)

While the mobile phone is indispensable for many consumers



Higher Among	
15-24	64%
C2s	56%
Students	63%
Live in Dublin	52%
Live in Rest of Leinster	50%
No Fixed Line	57%
Have Broadband	50%
Recent VoIP usage	50%
Mobile only users	60%

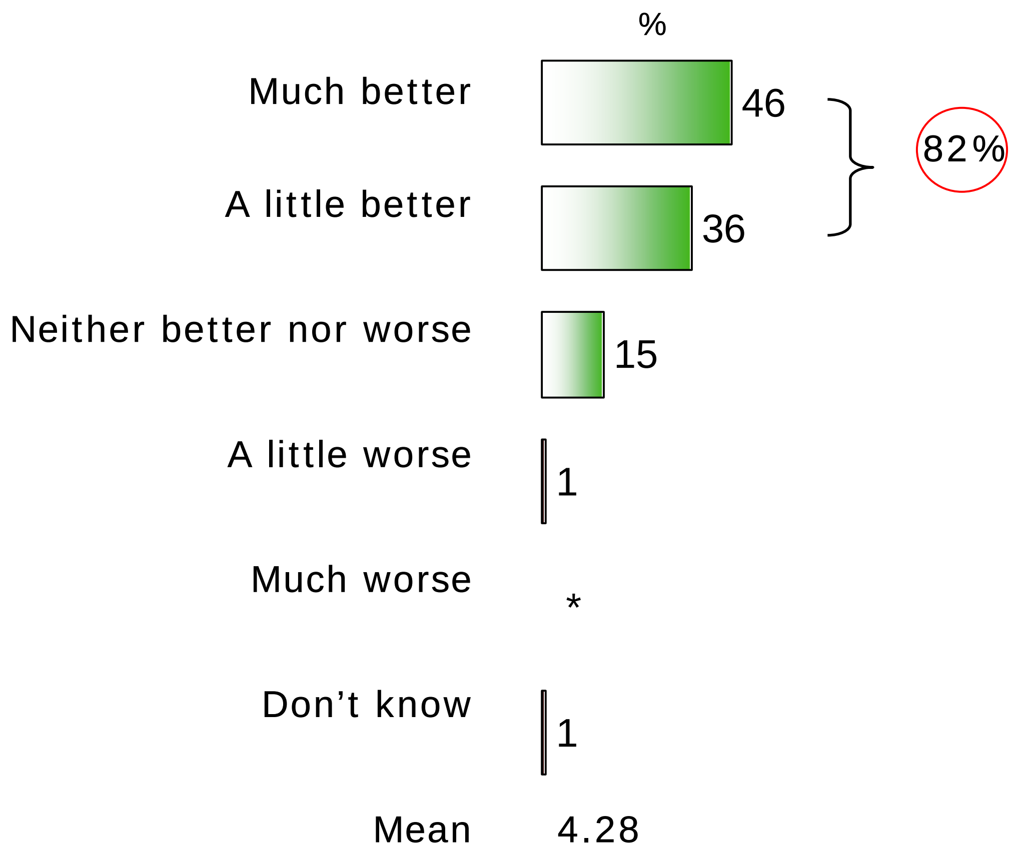
Higher Among	
65-74	38%
DEs	27%
Live in Munster	34%
No home PC	30%
No Internet access	28%

Q. Which **ONE** of the following communications devices/services do you feel you could not live without?

Base: All Respondents (n=1002)

Generally consumers do see technology as a positive force

Q. Overall, would you say that technologies like mobile phones, the Internet, TV, radio and games consoles have made the quality of your life....



Base: All Respondents (n=1002)

Commission for
Communications Regulation

Conclusions

- The period from 1998-2008 saw liberalisation of the Irish telecoms market, rising consumer income, strong demand for communications products and services as well as development of new services such as mobile voice and data services and broadband.
- Consumers in Ireland are open to using new technologies such as mobile phones, digital TV and game consoles.
- However there are still challenges for policy makers and the industry: around 40% of households do not have any form of internet access, and there are regional and social challenges in terms of availability and adoption of communications technologies and services.
- The recent economic downturn also presents challenges in terms of affordability of and access to telecoms services.