

The Communications Market 2007 Nations and Regions

2 Communications markets across the United Kingdom

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2.1 Setting the scene

2.1.1 Introduction

The United Kingdom consists of the four nations of Scotland, Wales, Northern Ireland and England. For the purposes of Government administration, England is broken down into regional government offices – London, the South East, South West, East of England, West Midlands, East Midlands, North East, North West and Yorkshire & Humberside. The particular geographic and economic characteristics of each nation and region can influence the availability, take-up and consumption of communications services. The following section sets the scene for understanding the socio-demographic features of the UK's nations and regions. It reviews population sizes, age profiles, urban and rural residence, incomes, expenditure and socio-economic profiles. Note that much of the data in this section relies on 2001 Census data and, as such, has not changed materially since the 2006 report.

2.1.2 Socio-demographic features

The ONS estimates that there are 59.8 million people in the United Kingdom. The South East, London and North West regions are the most populated, with 8.1m, 7.4m and 6.8m people respectively – over a third of the UK total. The areas with the smallest populations are Northern Ireland (1.7m or 3%), North East England (2.5m or 4%) and Wales (3m or 5%) (Figure 2.1).

Figure 2.1 Population across the nations and regions

Population (m)

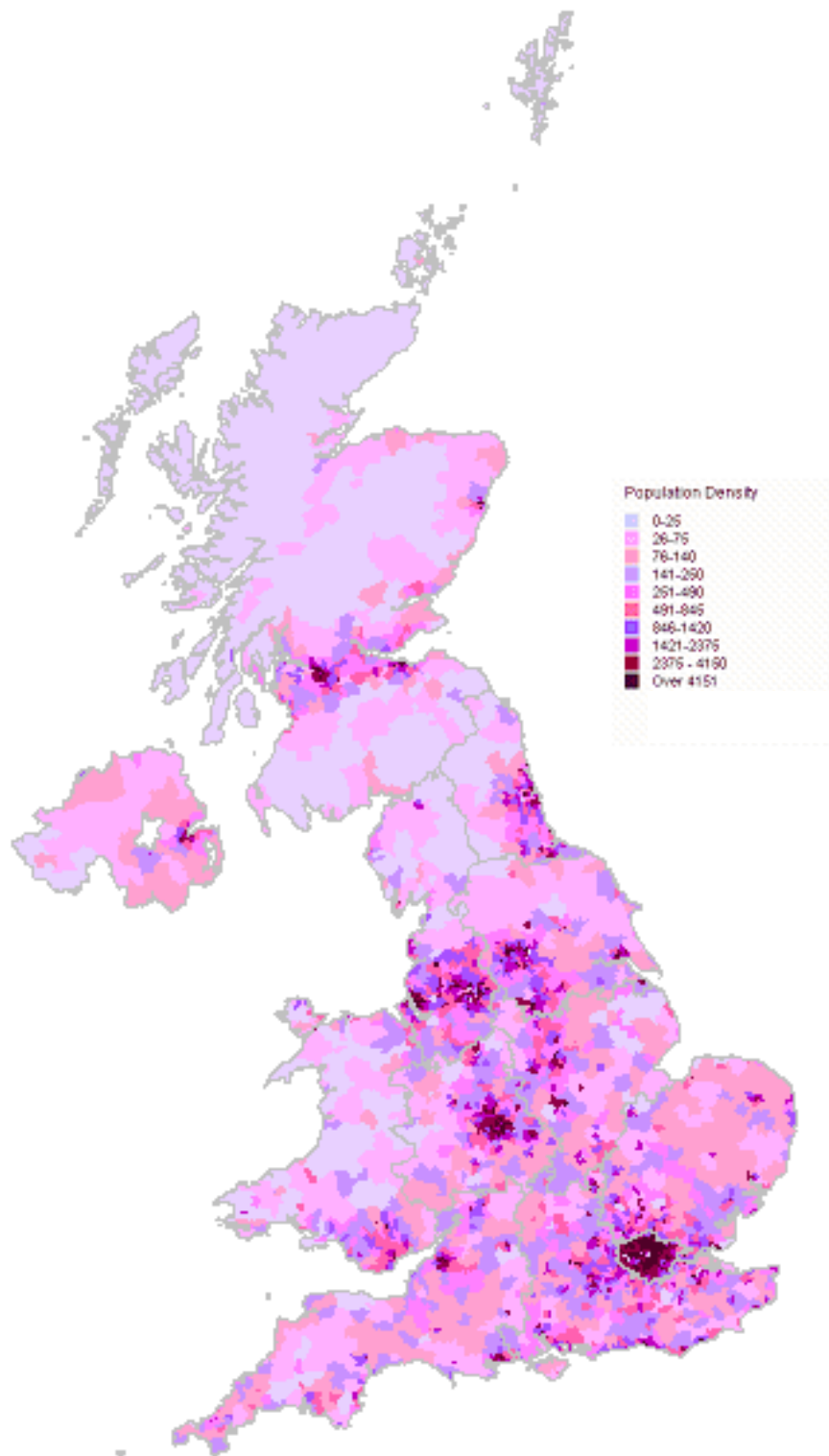


Note: Total UK population 59.7m

Source: Office of National Statistics, Regional Trends 39: 2006 Edition

Figure 2.2 illustrates patterns of population density across the UK. The areas with the highest population concentration are found London, Birmingham, Manchester, Liverpool, Newcastle, Glasgow, Edinburgh, Belfast and Cardiff. By contrast, many parts of Scotland, Wales, Northern Ireland the North of England, South West and East of England are relatively sparsely populated.

Figure 2.2 Population density map of the UK

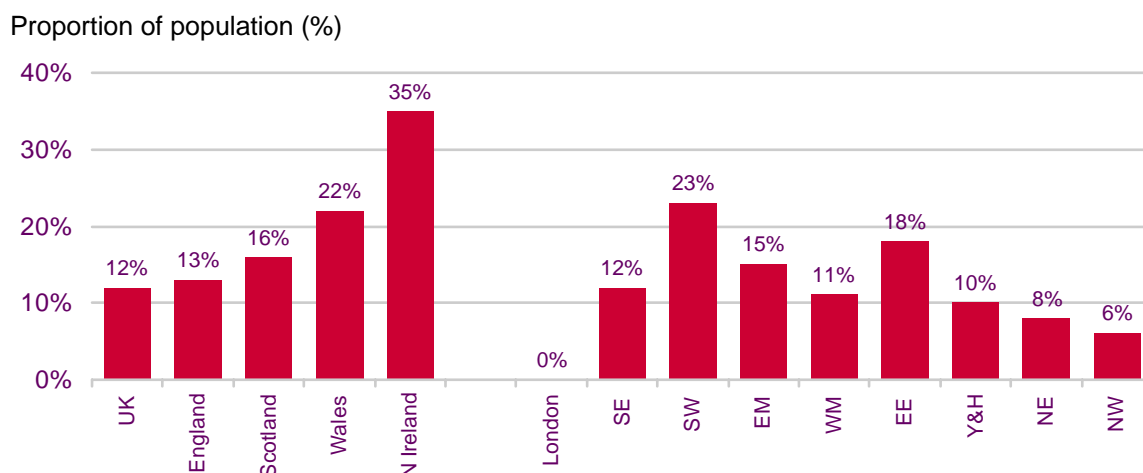


Source: Ofcom, based on Office of National Statistics 2001 Census data (National Statistics website: www.statistics.gov.uk Crown copyright material is reproduced with the permission of the Controller of HMSO)

The majority of the UK population (88%) resides in urban areas. London, the North East and North West England have the highest proportions of urban dwellers - over 90% each.

Northern Ireland has the largest rural population (35%); followed by Wales and South West England (22% and 23% respectively) (Figure 2.3).

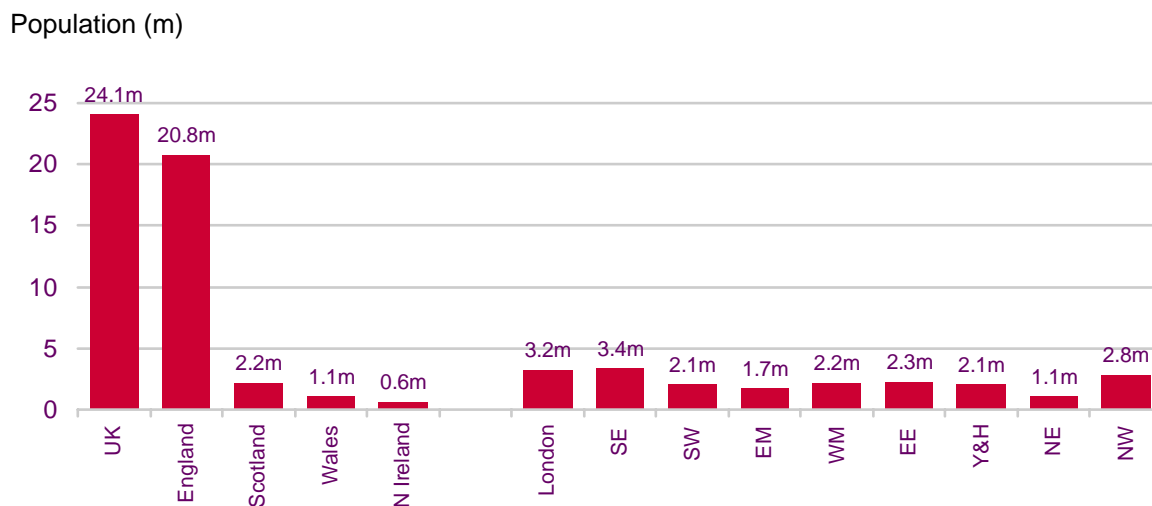
Figure 2.3 Percentage of population living in rural areas



Note: 'Rural' means settlements with fewer than 2,000 people and less than ten miles from a larger settlement. Source: Business Geographics 'Urban Indicator'

Of the 24.1m households in the UK, most (20.8m) are located in England, with London, the South East and the North West regions accounting for 9.4m or 39% of the total. Northern Ireland, North East England and Wales have the lowest number of households with 0.63m, 1.07m and 1.19m respectively (Figure 2.4).

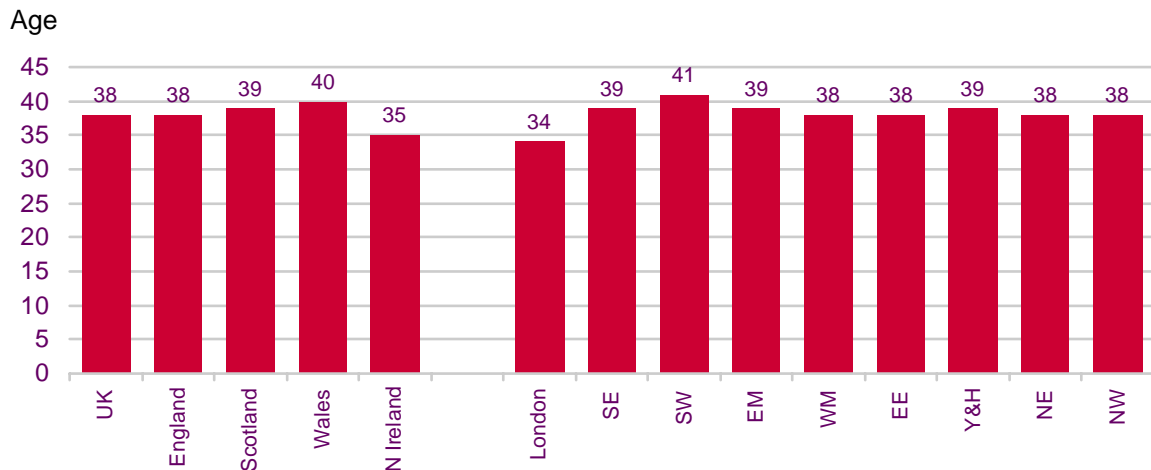
Figure 2.4 Households in each nation and region (2001, millions)



Source: Office of the Deputy Prime Minister; National Assembly for Wales; Scottish Executive; NISRA

The median age in the UK is 38. London and Northern Ireland stand out with a significantly lower median of 34 years and 35 years respectively. Wales and the South West of England have the oldest populations with median ages of 40 and 41 respectively (Figure 2.5).

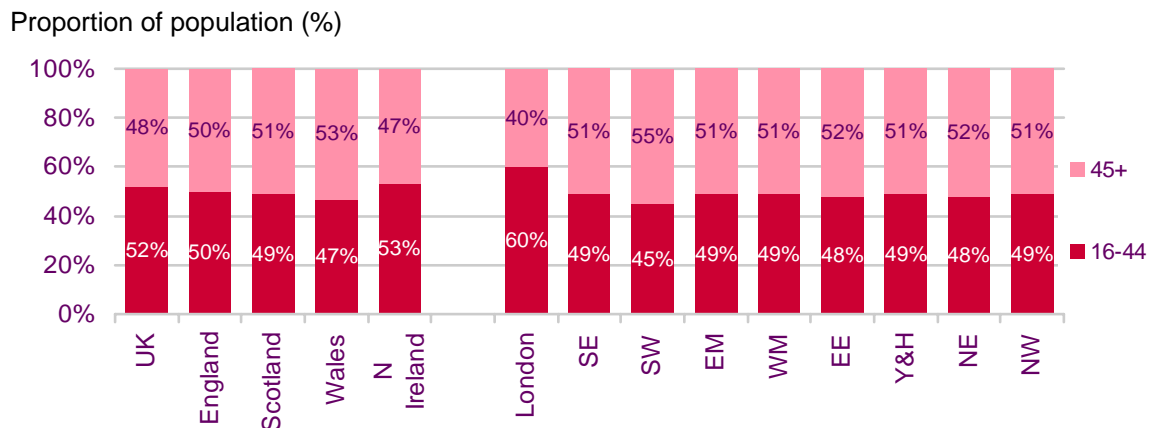
Figure 2.5 Median age across the UK



Source: Office of National Statistics, Census 2001 (National Statistics website: www.statistics.gov.uk Crown copyright material is reproduced with the permission of the Controller of HMSO)

About 51% of the UK population are between 15-44 years old and about 49% are 45 or older. Scotland, London and Northern Ireland have the highest proportion of 15-44 year olds (60%, 58% and 55% respectively) and South West England has the highest percentage of over-45s (55%) (Figure 2.6).

Figure 2.6 Age profiles

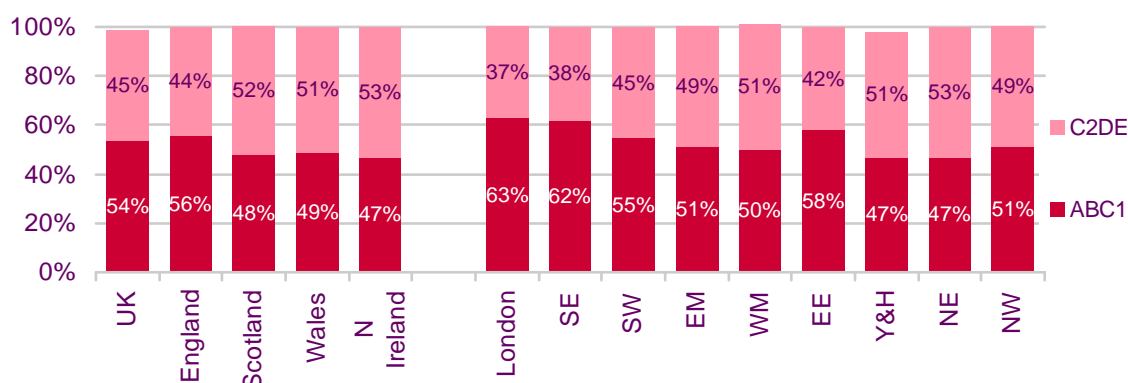


Source: Office of National Statistics, Census 2001 (National Statistics website: www.statistics.gov.uk Crown copyright material is reproduced with the permission of the Controller of HMSO)

Fifty-four per cent of the UK population are ABC1s and 45% are C2DEs. London and South West England have the highest proportions of ABC1s; 63% and 62% respectively. Northern Ireland and North West England have the highest proportion of C2DEs at 53% each (Figure 2.7).

Figure 2.7 Socio-economic profiles

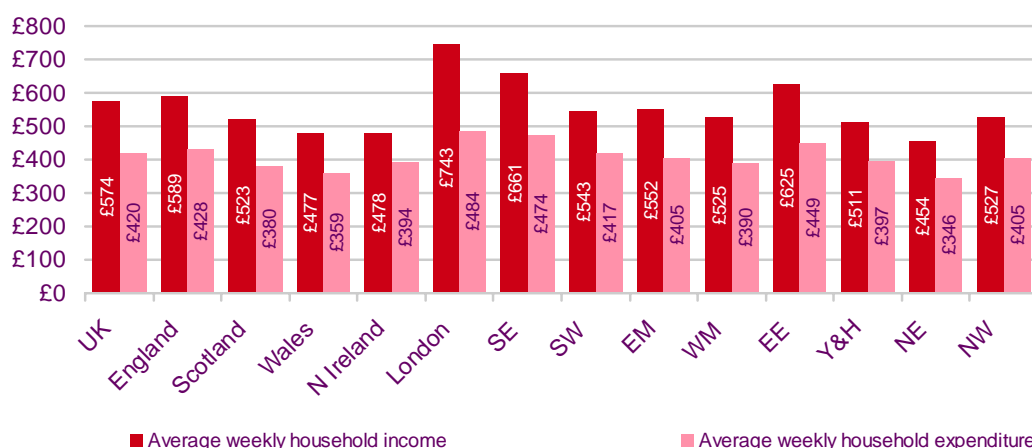
Proportion of population (%)



Source: Office of National Statistics, Census 2001 (National Statistics website: www.statistics.gov.uk Crown copyright material is reproduced with the permission of the Controller of HMSO)

London, the East of England and the South East have the highest weekly household incomes (£743, £661 and £625 respectively) and the highest weekly household expenditure (£484, £474 and £449 respectively). North East England and Wales have the lowest household incomes (£454 and £477 respectively) and the lowest weekly expenditure (£346 and £359 respectively) (Figure 2.8).

Figure 2.8 Average weekly household income and expenditure



Source: Office of National Statistics, Family Spending, A Report on the 2004-2005 Expenditure & Food Survey 2005 Edition. ONS published 10 March 2006 (National Statistics website: www.statistics.gov.uk Crown copyright material is reproduced with the permission of the Controller of HMSO)

2.1.3 Other features of the nations and regions

2.1.3.1 The English regions

England is governed by Her Majesty's United Kingdom government. Each of England's nine regions has a Regional Assembly, which is comprised of local representatives, and a Government Office, which has some responsibility for transport, industry, agriculture, employment, training and the environment. The Government Offices represent central government in the regions and work with Regional Development Agencies to spur economic development. The nine regions also act as England's European Parliament constituencies.

England accounts for roughly 85% of the UK population. Its regions are diverse in their income distribution, geography, socio-economic composition and population characteristics, ranging from highly rural localities such as the South West and East regions, to mainly urban regions such as London, the North West and the North East. England's population has the highest proportion of ethnic minorities of any of the nations; reaching 28.8% in London. The largest minority groups are Asian (42.2%; almost half of whom are Indian), black Caribbean (16.7%) and black African (18.4%). The English regions also show significant disparities in income levels; the highest average weekly income is in London (£743) and the lowest is in the North East (£454).

2.1.3.2 Scotland

Scotland borders England, the North Sea and the Atlantic. It accounts for roughly a third of Great Britain's landmass and, in addition to the mainland, has over 790 islands. Scotland has its own parliament with devolved powers

Scotland has a population of roughly 5.1m, which fell by 2% between 1981 and 2004. A large proportion of the population lives in the central belt, partly due to the inaccessibility of much of the Scottish Highlands and Islands, where the mountainous landscape causes coverage difficulties for mobile phones, television and radio services. The Scottish Borders are similarly affected. Scotland's capital and second largest city is Edinburgh; its largest city, Glasgow, houses about 40% of the population, although this has fallen by 19% since 1981. In 2004, Scotland had the highest proportion of one-person households in the UK, at 32% compared to the UK average of 29%.

The employment rate (for people of working age) was 75% in April 2005 (UK average: 74%). Gross weekly earnings at that time for full-time employees on adult wages was £448 for males and £362 for females. The proportion of working-age people qualified to A level/equivalent or higher was the highest in the UK, at 59%, in Spring 2005.

2.1.3.3 Wales

Wales has a distinct culture and its own language, spoken by one-fifth of the population. Wales has a partially devolved system of government, represented by the Welsh Assembly. The nation has a population of just under three million, up 4.9% between 1981 and 2004, with the largest increase in Ceredigion, at 27.6%. Wales has a slightly higher than average median age (40) compared to the UK (38). Forty-eight per cent of its residents are 15 - 44 years old and 52% are 45 or older.

Wales has higher levels of deprivation and less financial wealth than much of the UK. The employment rate in Wales was 71% (among people of working age), compared to the UK average of 74%, in spring 2005. Gross weekly earnings averaged £433.20 for men and £337.00 for women; representing 8% and 9%, respectively, below UK average levels. In 2003, manufacturing accounted for 19% of Wales' Gross Value Added (UK average: 15%). Distribution, hotels and catering, and repairs accounted for 29% of businesses (UK average: 28%).

2.1.3.4 Northern Ireland

Northern Ireland covers an area of 5,459 square miles; about a sixth of the island it shares with the Republic of Ireland. It consists of six counties – Antrim, Armagh, Down, Fermanagh, Londonderry and Tyrone – and its capital city is Belfast.

Northern Ireland was defined under the Government of Ireland Act, 1920. Devolution returned to the Northern Ireland Assembly on May 8 2007, following elections held in March

2007. Of the 108 seats in the Assembly the DUP won 36, Sinn Fein, 28; the UUP, 18; the SDLP, 16; the Alliance Party, 7; the Green Party, 1 and the PUP, 1. Dr Ian Paisley of the DUP and Martin McGuinness of Sinn Féin became First Minister and Deputy First Minister respectively. Northern Ireland has 11 Government Departments, 26 local councils, four Health Trusts and five Education and Library Boards.

Northern Ireland has a population of 1.7 million, of which 35% live in rural areas - a higher proportion than in the other three nations. The population is growing rapidly, increasing by 11% between 1981 and 2004 compared to a UK average rise of just 6%. The nation has the highest proportion of C2DEs in the UK (53%) and the highest percentage of white residents (99%). Twenty-two per cent are under the age of 16 and 16% are of pensionable age.

Northern Ireland's employment rate (for people of working age) was the lowest in the UK in spring 2005. Gross weekly earnings for full-time employees averaged £410 for men and £356 for women, 13% and 4% percent, respectively, below UK averages (April 2005). Twenty-two per cent of businesses were in the agriculture, hunting, food and forestry sectors; the highest percentage in the UK.

2.2 Communications services in rural and urban areas

2.2.1 Introduction and background

The 2006 *Nations and Regions Report* found that levels of take-up and consumption of communications services were largely dependent on whether consumers lived in an urban or a rural area of the UK. To understand this rural-urban split more fully, we commissioned a set of quantitative research surveys in each of the UK's nations to allow comparisons to be made between the behaviours and attitudes of consumers in urban and rural areas in each country.

The research objectives were:

- to explore *perceived* levels of communication service availability in urban and rural locations across the UK and claimed levels of take-up;
- to identify the proportion of consumers in rural and urban areas who wanted to acquire a service they currently believed was not available to them; and
- to examine the attitudes held by people in both urban and rural areas towards widening communication services access in rural regions.
- The findings discussed in this section are drawn from three surveys:
- A telephone survey in **England** and **Northern Ireland** conducted by ICM Research. Respondents in England were classified as living in urban or rural areas based on their postcode³, and ICM spoke to 684 people in urban areas and 400 in rural areas. Respondents in Northern Ireland were classified according to an approach recommended by the Northern Ireland Statistics and Research Agency⁴; ICM spoke to 402 people living in urban locations and 401 in rural locations.

³ Output areas and Wards have been classified as 'Urban' where the majority of the population in the area falls inside an 'urban area' with a population of 10,000 or more. All other areas have been treated as 'Rural'. The methodology for the remaining 'rural' areas focuses on all settlements of whatever size below the 10,000-population figure. The classification was constructed from an underlying settlement classification based on hectare squares. For each hectare square a series of densities are calculated for addresses in a given hectare square and the surrounding squares. Every hectare square is then associated with particular settlement type: dispersed dwelling, hamlet, village, small town, urban fringe and urban. Secondly, each hectare square is given a 'sparsity' score based on the number of people in surrounding hectare squares. For example, a square might lie within a village and be relatively sparse. Output areas and wards are then classified by looking at the mix of hectare squares within them.

Initially OAs are classified as either sparse or less sparse, and are then grouped into four predominant settlement types (urban 10K, town & fringe, village, hamlet & isolated dwelling). It is possible to analyse OAs using one or both layers - for example, sparse OAs, village OAs, or villages located in sparse OAs. When analysing the latter, users MUST be aware that sparse relates to the surrounding area. Users should interpret the village-sparse OA as a 'village that is surrounded by a relatively sparse population density'. Wards are classified similar to the OAs, except the last two types (village and hamlet & isolated dwelling) are combined into one type (village).

⁴ http://www.nisra.gov.uk/statistics/financeandpersonnel/DMB/ur_main.pdf

- A bespoke face-to-face survey in **Scotland** conducted by Recom (Research in Communications). The sample was designed in accordance with the Scottish Executive's six-fold urban/rural classifications. Recom spoke to 764 people in rural areas and 763 in urban locations. The full results of this research are outlined in the *Scotland Communications Market Report*, which is available on the Ofcom website⁵.
- A large scale face-to-face survey in **Wales** conducted by ORC International for Broadband Wales. Respondents who said they lived in a city or large town were classified as urban and those who said they lived in a small town or a village were classified as rural. This survey included 1,681 people in urban areas and 3,781 from a rural location.

Because three separate pieces of research with differing methodologies were undertaken to build a UK-wide picture, there is a limit on the level of comparability between the results from each nation. Comparisons between nations in the following section should therefore be regarded as indicative only.

A note on survey data in this section

Some of the survey data in this section suggest different levels of take-up of communications services to those derived from Ofcom's tracker survey, which is used in other sections of this report. The primary purpose of the research in this section was to measure differences between urban and rural areas. The differences can be explained by several reasons:

- **Sample.** The research was conducted by a different research agency, using a slightly different sampling approach
- **Methodology.** The use of a telephone survey meant that about 1 in 10 consumers with mobile phones only were excluded from this survey. Also, telephone research does not allow the use of 'showcards', which can help explain services more clearly to respondents.
- **Question wording.** As the surveys had different objectives, some slight differences in question wording may have had an impact.
- **Timing.** The tracker research data is based on a survey conducted continuously throughout 2006, whereas the data in this section is based on research conducted at a single point of time in 2007.

The figures on digital radio use should be treated with particular caution, as many consumers do not appear to realise they have access to digital radio via a TV set top box and there may also be some confusion with digital tuners on analogue radios.

2.2.2 UK-wide picture

Three issues connected to the perceived *availability* and take-up of communications services in urban and rural areas were explored in the research - perceived availability of communications services in the rural and urban areas of the UK's nations; demand for services from those who perceive themselves to be deprived of services and attitudes towards widening access to communications services in rural locations.

2.2.2.2 Take-up of communications services in urban and rural areas across the UK

There was a consistent picture of lower levels of service take-up in the rural areas of Scotland, Wales and Northern Ireland, but to a lesser extent in England. The gap in claimed take-up was widest for broadband (54% versus 45% in Scotland, 57% versus 58% in Wales

⁵ See www.ofcom.org.uk/research/cm

and 56% versus 45% in Northern Ireland). The claimed gap in digital television take-up was also substantial in Wales and Northern Ireland (95% versus 91% and 77% versus 61% respectively).

2.2.2.3 Perceived availability of communications services across the UK

From the perspective of perceived availability, urban and rural consumers in England held similar views about their access to communications services. In Scotland, Wales and Northern Ireland, by contrast, there were substantial gaps in perceived availability of 3G mobile and DAB digital radio.

On 3G mobile, urban consumers across Scotland and Wales expressed relatively high levels of perceived availability (82% 51% respectively), which contrasted with substantially lower perceived levels in rural locations (68% and 39%). For DAB digital radio, large perception gaps existed in all three nations. In urban locations in Scotland, Wales and Northern Ireland 92%, 69% and 62% of consumers respectively believed the service was available to them. This contrasted with sharply lower levels of perceived availability in rural locations – 75%, 61% and 53%. In addition, there was a substantial gap in perceptions connected to broadband availability in Wales – 90% of people in urban areas believed the services were available to them, contrasting with 82% of people in rural locations.

2.2.2.4 Demand for communications services that are not yet available to consumers

In both England and Scotland, the research identified few people who believed they could not access a communications services but who would to do so were they available. This contrasted with Wales and Northern Ireland, where there were a larger number of people who wanted access to service they believed they could not get. DAB digital radio emerged in both countries as a service where this ‘latent’ demand was highest, with 11% and 9% of those surveyed expressing an interest. There was a material interest in access to 3G among those who perceived they did not have access, with 7% and 8% in Wales and Northern Ireland respectively.

2.2.2.5 Consumer attitudes towards widening communications services in rural areas

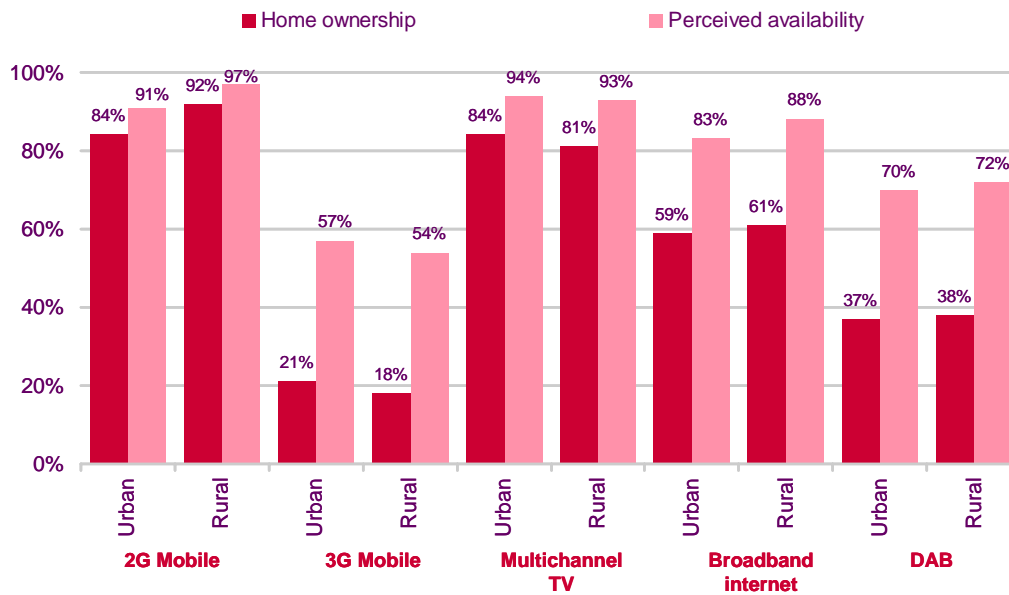
The final topic explored in this research related to attitudes towards making communications services available to consumers in rural locations.

There was strong agreement across all nations and all locations (rural and urban) that people in rural areas should have equal access to communications services that were already available in urban locations; that said, many people in urban locations in Scotland believed that people in rural locations could not expect the same range of services as those in urban regions.

2.2.3 Take-up and perceived availability of services in England

The survey data from England show very little difference in levels of take-up or perceived availability of any communications service. One surprising finding was that household take-up of mobile phones appears higher in rural areas, although this is almost certainly because households they are more likely to rely solely on a mobile phone, and as such would have been excluded from this landline telephone survey methodology (Figure 2.9).

Figure 2.9 Claimed ownership & perceived availability of communications services in England

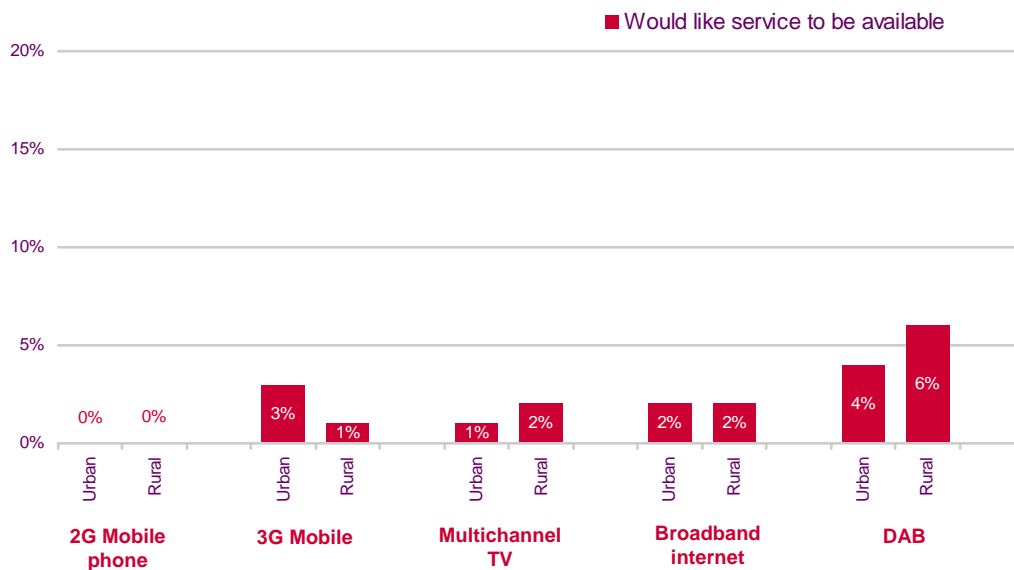


Source: ICM Research. Base: Adults aged 16+ in England. Urban n = 684. Rural n = 400
 Perceived availability of narrowband was not asked (telephone survey)
 DAB radio also includes those with digital radio accessed this through a TV set top box.

While there may be some areas of England where consumers are disadvantaged due to communications services not being available, this survey shows that in most rural areas, take-up levels and consumers' perceived availability of communications services are no different from that in urban areas.

Small minorities of the population in England would like various communications services to be available to them (although not mobile phones, where perceived coverage appears to entirely meet demand). DAB digital radio is the service that appears to have the most scope to improve coverage to meet interest in England, with six per cent of consumers in rural areas and four per cent in urban areas saying that they would like the service to be made available to them at home (Figure 2.10).

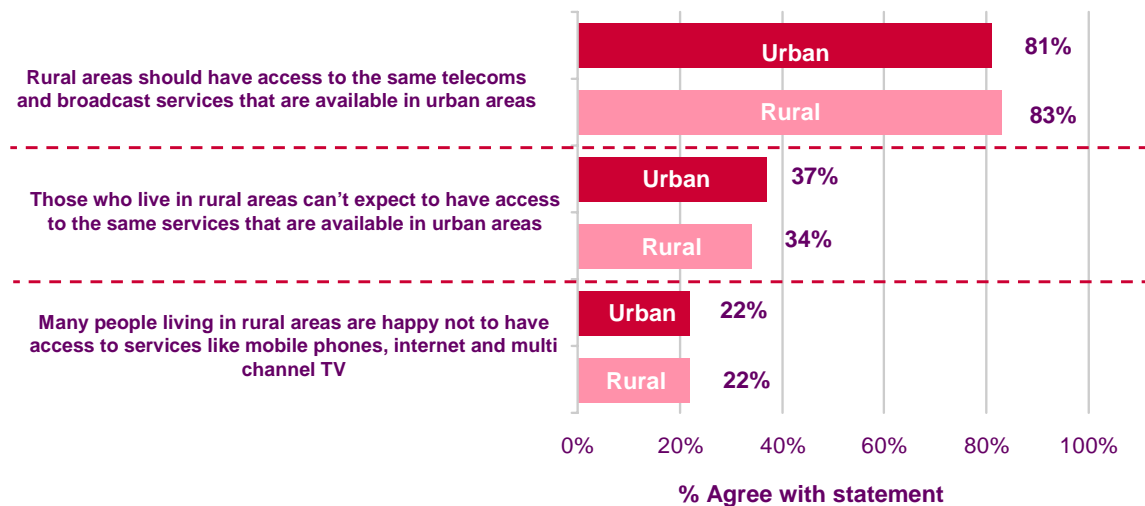
Figure 2.10 Desire for services to be made available in England



Source: ICM Research. Base: Adults aged 16+ in England. Urban n = 684. Rural n = 400

Consumer attitudes to communications service availability do not differ significantly between urban and rural areas in England. The majority (over eight in ten) agree that the same telecoms and broadcast services should be available in urban and rural areas. However many also agree that it is not pragmatic for those in rural areas to expect to have access to the same communications services as those in urban areas. About one in five in both rural and urban areas agree that some people are actually quite content without having access to services like mobile phones, internet and multichannel TV (Figure 2.11).

Figure 2.11 Attitudes towards communications service availability in rural areas in England



Source: ICM Research. Base: Adults aged 16+ in England. Urban n = 684. Rural n = 400

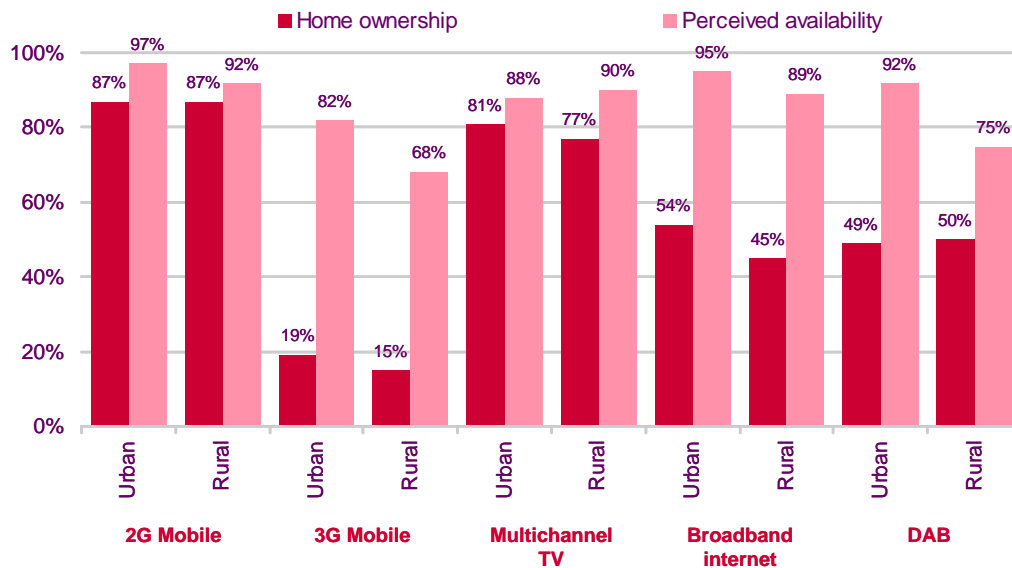
2.2.4 Take-up and perceived availability of services in Scotland

In Scotland there are variations in internet connection methods between urban and rural areas. Total household penetration of internet is only marginally higher in urban areas, but there is a significant difference in take-up of broadband, with take-up in urban areas nine

percentage points higher than in rural areas. Related to this fact, narrowband dial-up connections are almost twice as prevalent in rural areas as in urban areas.

There are also differences in the perception of service availability – all services, with the exception of multichannel TV, are significantly more likely to be perceived as being available in urban areas. Perceptions of DAB digital radio and 3G mobile availability are also much higher in urban than in rural areas, with differences of 17 and 14 percentage points respectively (Figure 2.12).

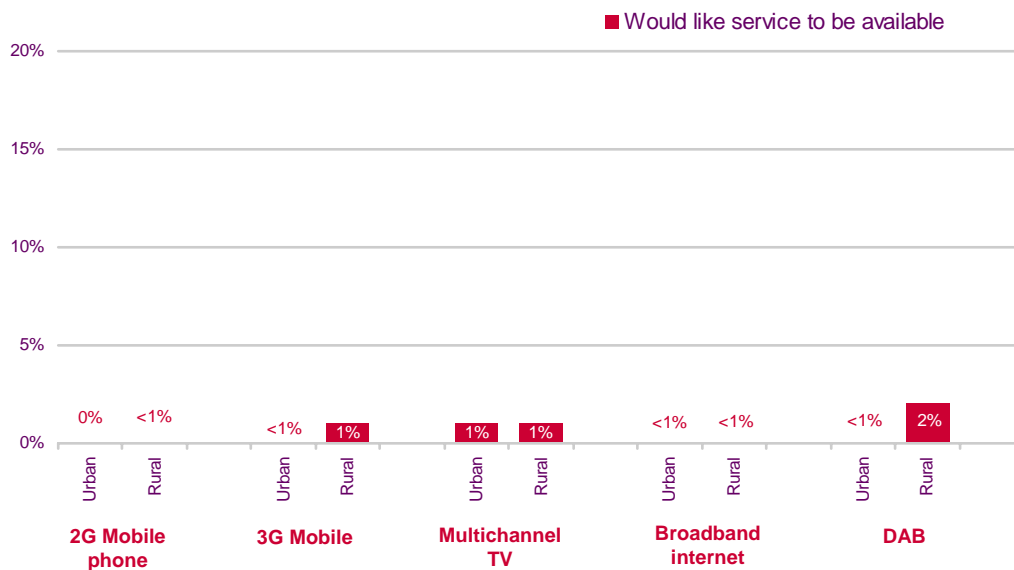
Figure 2.12 Claimed ownership and perceived availability of communications services in urban and rural areas in Scotland



Source: Recom Research. Base: Adults aged 16+ in Scotland. Urban n = 764. Rural n = 763
 DAB radio also includes those with digital radio accessed through a TV set top box. DAB radio set penetration stood at 17% in rural areas and 20% in urban areas.

Despite the difference in perceived service availability between rural and urban areas, of there is relatively low interest in increasing levels of access in rural areas, peaking at just 2% for those who would like to be able to get DAB digital radio (Figure 2.13).

Figure 2.13 Desire for services to be made available in Scotland

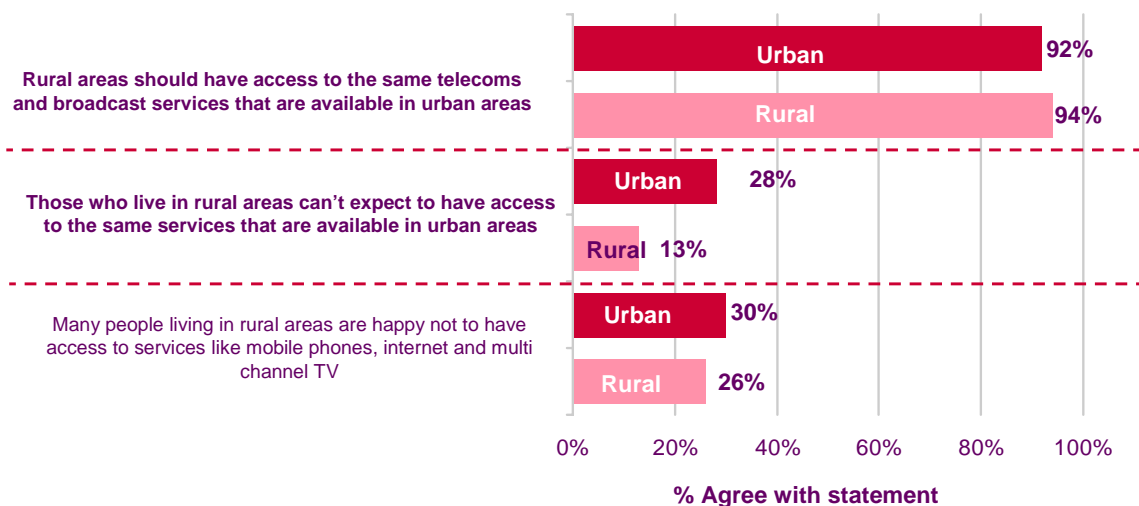


Source: Recom Research. Base: Adults aged 16+ in Scotland. Urban n = 764. Rural n = 763

People living in both urban and rural areas in Scotland appear to share similar attitudes to communications service availability. The majority (over nine in ten) agree that rural and urban areas should have access to the same communications services, although just over a quarter agree that some people in rural areas are happy not to have access to these services.

There is however, an attitudinal difference on whether people in rural areas should *expect* the same levels of communications services that are available in urban areas. Those living in rural areas are less likely to agree with this statement, perhaps demonstrating a stronger belief in the principle of equal access than in the other nations (Figure 2.14).

Figure 2.14 Attitudes towards communications service availability in rural areas in Scotland



Source: Recom Research. Base: Adults aged 16+ in Scotland. Urban n = 764. Rural n = 763

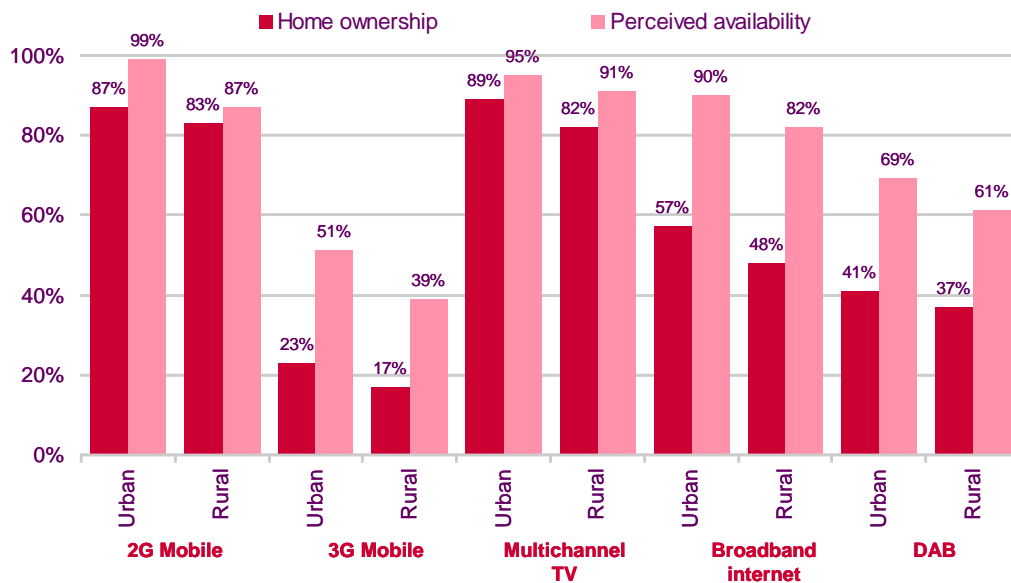
The findings in Scotland suggest that differences in attitudes towards communications services in urban and rural areas is widest of all the UK nations.

2.2.5 Take-up and perceived availability of communications services in Wales

In Wales the most notable differences in service take-up are the higher household penetration of 3G mobile, multichannel TV and broadband in urban areas.

There are also differences in the perception of service availability; all services are significantly more likely to be perceived as available in urban areas. Perceptions of availability of 3G mobile are much higher in urban (51%) than they are in rural (39%) areas (Figure 2.15).

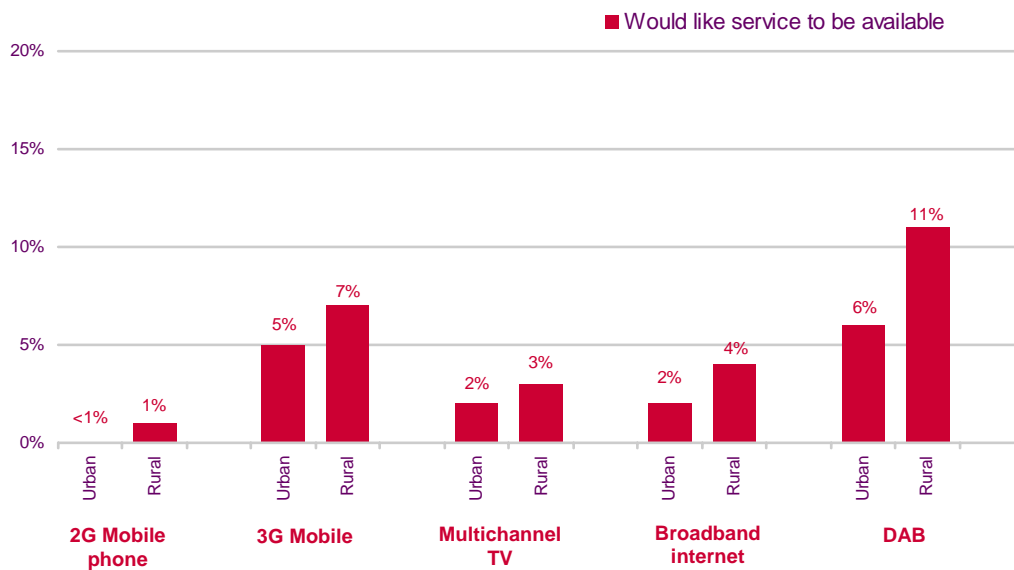
Figure 2.15 Claimed ownership and perceived availability of communications services in urban and rural areas in Wales



Source: ORC International. Base: Adults aged 18+ in Wales. Urban n = 1681. Rural n = 3718
DAB radio also includes those with digital radio accessed through a TV set top box.

People living in Wales have a comparatively high desire for communications services that are currently perceived as unavailable to be made available. Interest is greatest in 3G mobile and digital radio, with even higher levels of interest in rural areas where perceived coverage is lower (Figure 2.16).

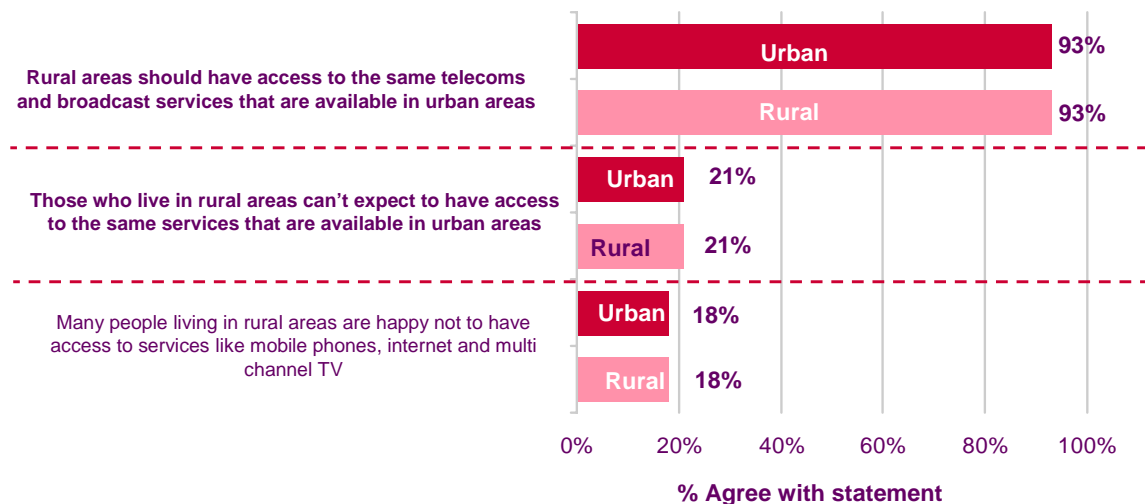
Figure 2.16 Desire for services to be made available in Wales



Source: ORC International. Base: Adults aged 18+ in Wales. Urban n = 1681. Rural n = 3718

People living in urban and rural areas in Wales appear to hold very similar views on access to communications services. In line with the other nations, the majority (over nine in ten, regardless of where they live) agree that rural and urban areas should have the same access to communications services, although around one in five agree that some people in rural areas are happy not to have access to these services (Figure 2.17).

Figure 2.17 Attitudes towards communications service availability in rural areas in Wales



Source: ORC International. Base: Adults aged 18+ in Wales. Urban n = 1681. Rural n = 3718

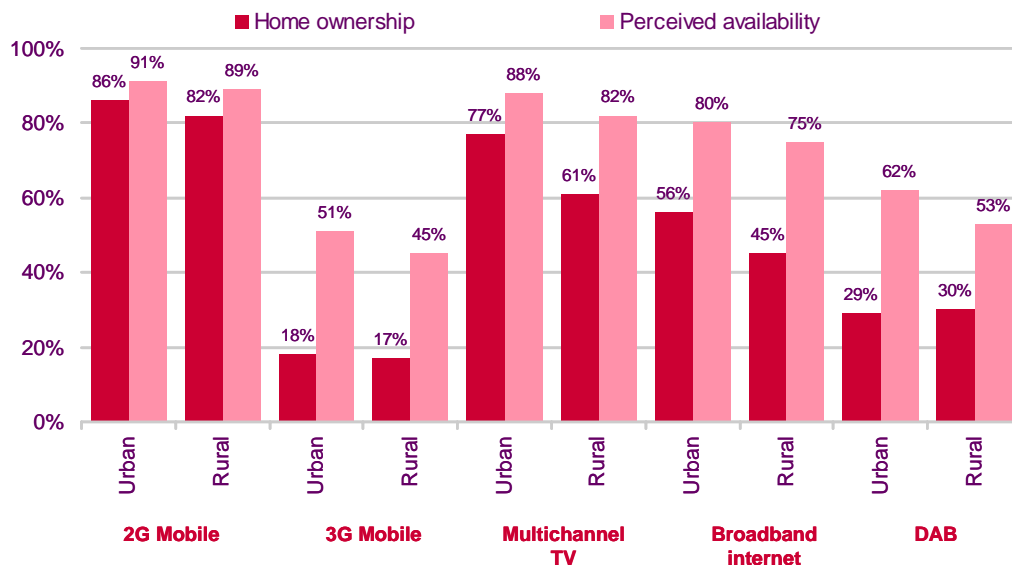
2.2.6 Take-up and perceived availability of services in Northern Ireland

The survey in Northern Ireland examined differences between urban and rural areas. The population profile of Northern Ireland is such that the west of Northern Ireland tends to be more rural than the east (which of course includes Belfast, where there is a population

concentration). As such, the description of the survey that follows also refers to differences between the east and west of Northern Ireland.

Figure 2.18 shows that take-up of multichannel TV and broadband are significantly lower in Northern Ireland’s rural areas than in the urban areas. Mobile phone household penetration is also slightly lower in rural areas. Internet penetration in rural areas lags behind urban areas by five percentage points. Broadband penetration stands at 56% of urban homes and 45% of rural homes. Unsurprisingly, given the differences between urban and rural areas, households in the east of Northern Ireland are significantly more likely to have broadband and multichannel TV than those in the west.

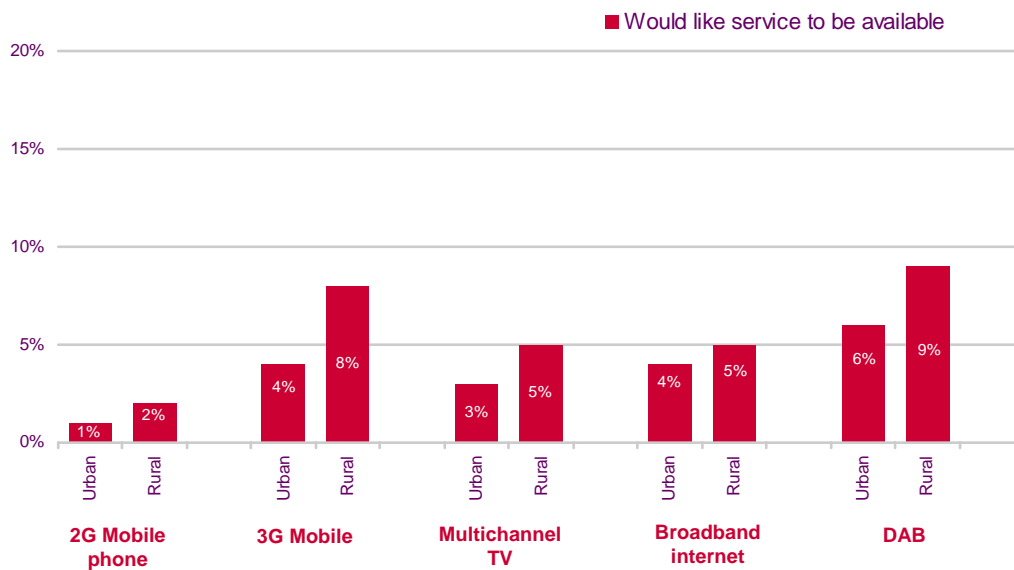
Figure 2.18 Claimed ownership and perceived availability of communications services in urban and rural areas in Northern Ireland



Source: ICM Research. Base: Adults aged 16+ in Northern Ireland. Urban n = 402. Rural n = 401
 Perceived availability of narrowband was not asked (telephone survey)
 DAB radio also includes those with digital radio accessed through a TV set top box.

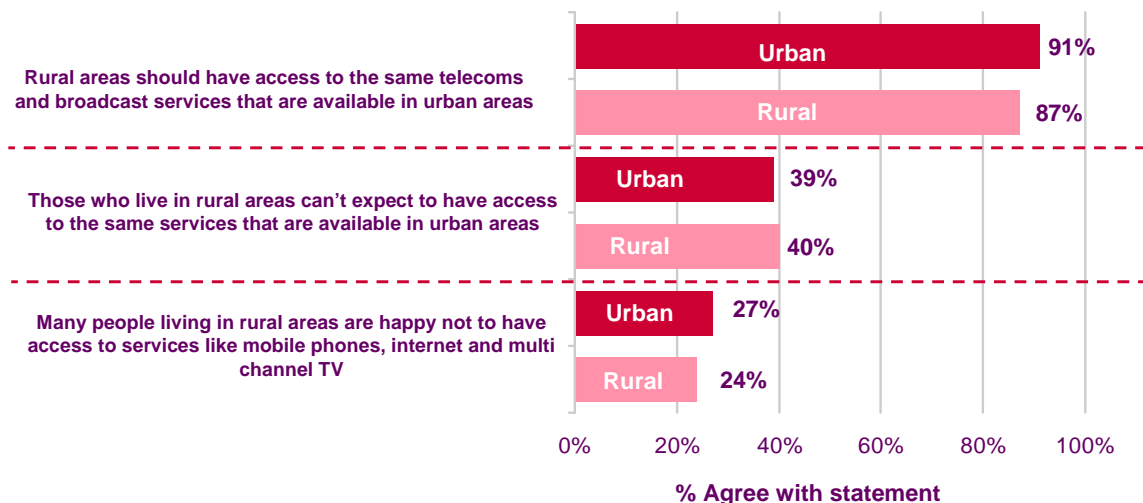
People living in rural areas in Northern Ireland perceive a lower level of availability of 3G mobile, multichannel TV, broadband and DAB digital radio than those in urban areas. Of all of the UK’s nations, those living in Northern Ireland appear to have the greatest desire for communications services that are currently perceived as unavailable to be made available. Between 5% and 10% of consumers in urban and rural areas say they would like more 3G, multichannel, broadband and/or DAB digital radio to be made available. Consistent with the perceived levels of availability, desire for these services appears greater in rural areas. (Survey results on service availability in the west of Northern Ireland are similar to the findings in areas defined as rural, due to the close overlap in the data sets (Figure 2.19).

Figure 2.19 Desire for services to be made available in Northern Ireland



Source: ICM Research. Base: Adults aged 16+ in Northern Ireland. Urban n = 402. Rural n = 401
 Attitudes to service availability are fairly similar in urban and rural areas in Northern Ireland. The majority (about nine in ten) agreed that the same telecoms and broadcast services should be available in urban and rural areas. However many also agree that those in rural areas cannot realistically expect to have access to the same communications services as those in urban areas. About a quarter of adults in all areas recognise that many people in rural areas are actually quite content without access to services like mobile phones, internet and multichannel TV (Figure 2.20).

Figure 2.20 Attitudes towards communications service availability in rural areas in Northern Ireland



Source: ICM Research. Base: Adults aged 16+ in Northern Ireland. Urban n = 402. Rural n = 401
 Perceived availability of narrowband was not asked

2.3 Comparative analysis of communications markets in the nations

The following section provides a summary comparative overview of communications markets across the UK's four nations. Sections 3, 4 and 5 provide more in-depth examinations of the television, radio and telecommunications markets.

2.3.2 The television market

2.3.2.1 Programme investment

£326m invested in programmes for viewers in the nations and regions in 2006

UK-wide investment in programmes commissioned specifically for viewers in England, Scotland, Wales or Northern Ireland reached £326m in 2006, down 17% in real terms on the equivalent figure for 2001. Viewers in England benefited from the greatest investment, at £192m, with commissions for Scotland totalling £63m, £37m for Wales and £33 for Northern Ireland.

Overall, the UK-wide budget fell by 3.8% per annum over the five years to 2006, with the Northern Ireland commissioning budget falling fastest, at 5.1% p.a. It was followed by England, with an average annual reduction since 2001 of 4.6 per annum. In Wales the equivalent figure was 3.8% while in Scotland the budget remained largely static in real terms, experiencing a reduction of just 0.6% p.a. over the same period.

By genre, local news accounted for the largest proportion of the total budget for regional output in 2006, accounting for £201m or 62% of total spend in 2006. 'Other' output took a further 30%, with local Current Affairs programming making up the remaining 8% of £26m.

The pattern of investment by nation differed substantially. Spend on English regional output was largely concentrated in local news, which took 82% of the total budget of £192m. Current Affairs and 'other' took approximately equal shares of the remaining spend. In Scotland, however, 'other' accounted for £42m or 67% of total spend, with the equivalent budget allocations to 'other' in Northern Ireland and Wales standing at 58% and 51% respectively.

Per head, the total investment in regionalised output averaged £5.40 per head of population. Viewers in Northern Ireland benefited from the largest investment on a per capita basis, at £19.10 per head of population in 2006. They were followed by Scotland and Wales with £12.50 each, while investment per head in output for English viewers was just £3.80 in the same year.

Viewers in Northern Ireland also benefited from the genre with the highest per-capita investment where 'other' output reached £11.20 per head of population; investment in 'other' in Scotland stood at £8.40 per head in the same year, while news in Northern Ireland attracted £8.20 per head of population.

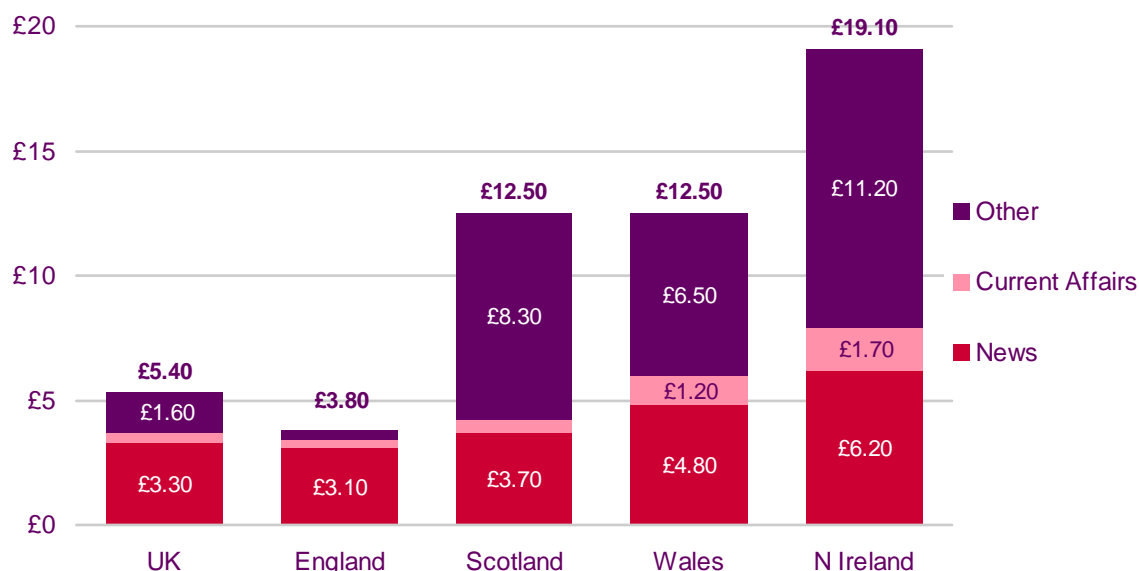
Across the UK, investment in 'other' output was the genre that experienced the greatest reduction in the five years to 2006, with a contraction of 38% over that period. This was followed by Current Affairs, where the reduction totalled 10%. Local news budgets, meanwhile, remained steady by comparison, shrinking by just 3%.

Investment in 'other' output for English viewers fell furthest by genre over the same period, reducing by 73%. That was followed by Current Affairs in Scotland (45%) and 'other' in

Northern Ireland and Wales (35% and 32% respectively). Current Affairs enjoyed substantial increases in investment both in Northern Ireland and Wales between 2001 and 2006, increasing by 90% and 17% respectively but, owing to their relatively small budgets, the absolute increases in investment were not substantial. By contrast, Scotland enjoyed a 22% uplift to its investment in 'other' output over the same period (Figure 2.21).

Figure 2.21 Investment per head in television output, by nation, 2006

Investment per capita (£)



Source: Broadcasters, Ofcom calculations

Viewers in Wales, Scotland and Northern Ireland also benefit from television output in Welsh and Gaelic. In the case of Wales and Northern Ireland, this output is carried on dedicated channels – S4C and TG4. In the case of Gaelic language output in Scotland, these programmes are broadcast by the BBC and ITV1.

2.3.2.2 Programme output

BBC and ITV1 schedules in Northern Ireland are the most regionalised in the UK

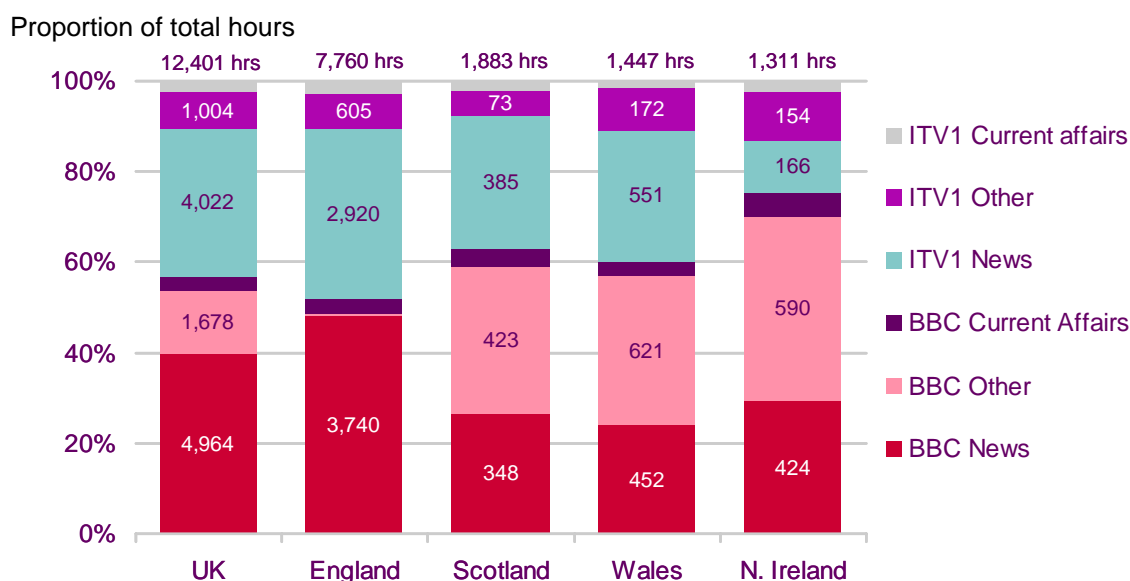
Total hours of television output for viewers in the nations and regions totalled 12,401 in 2006, down by 17% on five years earlier. Absolute volumes of output were highest in 2006 in England and totalled 7,760 (63% of the total); Scotland had 1,883 hours followed by Wales (1,447 hours) and Northern Ireland (1,311 hours).

Overall, 3.8% of the hours of content broadcast by the BBC and ITV1 across the UK were dedicated to programmes for viewers in the nations and regions. Despite lower absolute levels of regionalised hours, viewers in Northern Ireland saw the highest proportion (5.5%) of their schedules dedicated to regionalised output; the equivalent figures for Scotland and Wales were 5.4% and 5.0% respectively with 3.3% in England.

Seventy-two per cent of all regionalised hours broadcast in the UK were in the local news genre, with the BBC and ITV both making substantial contributions in 2006 (of 3,740 and 2,920 hours respectively).

In England, the proportion of total hours taken by local news was higher still at 86%. In Scotland, Wales and Northern Ireland, with more of the total budget invested in 'other' output, there was a more balanced split of hours between the two genres; news took 53%, 41% and 56% of total hours respectively (Figure 2.22).

Figure 2.22 Mix of national and regional output by genre and broadcaster



Source: Broadcasters

2.3.2.3 Cost per hour of national and regional output

Hourly value of Scottish and Northern Ireland regional output the highest in the UK

The average cost per hour of regional output across all genres and all nations stood at £26k in 2006. Cost per hour of output produced was highest in Scotland at £34k while in the remaining nations the equivalent figures fell in the range £25k - £26k.

At £37k per hour in 2006, 'other' output was the most costly to produce on an hourly basis; news was cheapest at £22k per hour. Across the nations, Scotland's 'other' output was the most heavily invested genre on a cost per hour basis at £53k, followed by 'other' in Northern Ireland (£39k) and Current Affairs in England (£38k).

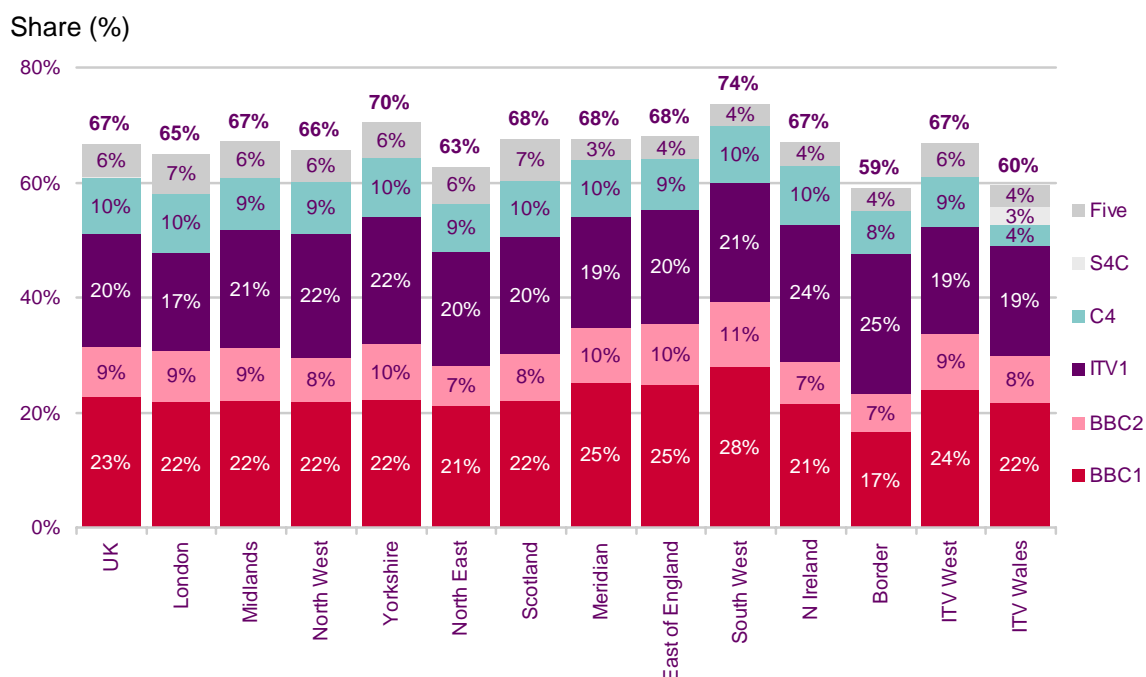
By producer type (in-house versus independent) the independent production sector benefited from a substantial increase in the value of regional hourly commissions in 2005 (the last year for which data were available at the time of writing) when compared to 2001, increasing by 67% to £41k per hour. Over the same period, in-house production remained more stable, at £28k per hour in 2006 (up by just £1k per hour on the 2001 equivalent). Independent production in Scotland and Northern Ireland was most heavily invested in the UK during 2006, at £57k per hour and £49k per hour respectively. The hourly cost of independent production in England, meanwhile, was the cheapest in the same year at £17k per hour. In-house production across the UK presented a more consistent picture across the nations, with hourly costs ranging from £24k in England to £34k in Scotland.

2.3.2.4 Market shares

Share of the five terrestrial networks highest in the South West of England

The all-homes share of the five terrestrial networks in 2006 stood at 67%, down three percentage points on 2005. Their combined share was highest in the South West of England where it reached 74%, explained by the higher than average popularity of BBC One. Share was lowest in the Border region at 59%, where BBC One share was substantially below the national average (17% versus 23%), possibly explained by the higher than average digital television penetration in these regions.

Figure 2.23 PSB share in all homes across ITV regions, 2006



Source: BARB

In multichannel homes, the BBC's portfolio of channels performed best in the South West of England, East of England and Meridian regions, but attracted the lowest shares in the UTV and Border television regions. ITV's best portfolio performance in 2006 was seen in the North West of England, with its lowest share in London and the ITV West regions. Channel 4's digital spin-off channels were notable for the proportionally large contribution they made to total portfolio share; together with the parent channel, share was highest in the Meridian, STV and London regions. Five's digital-only channels had recently launched at the time of writing, but Five itself put in its best share performance in Scotland, where it attracted a 7% share, while its share performance was lowest in the South West and Border regions (3% each).

Since 2002, the five terrestrial networks and their associated spin-off channels increased their combined share by five percentage points on a nationwide basis. Combined share grew by the greatest extent in the Meridian and North East regions (with net increases of eight and seven percentage points respectively). The greatest losses were felt in the Border region, with a net overall reduction of four percentage points of share over the four years to 2006.

2.3.2.5 DTV availability and take up

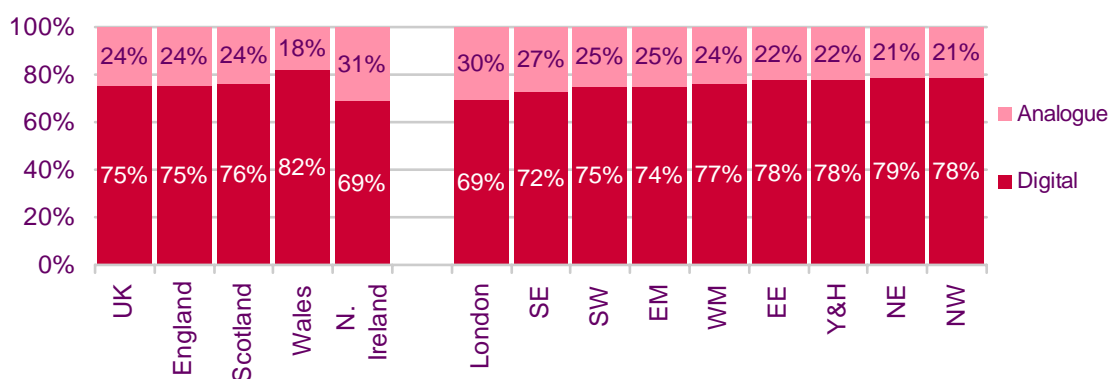
Digital television penetration highest in Wales and the North East of England

UK-wide digital television penetration averaged 75% in 2006. Reflecting the findings of the 2006 report, digital television penetration was highest in Wales with 82% of homes taking digital satellite, cable or Freeview. Penetration was lowest in Northern Ireland, where 69% of homes had a digital television reception device connected to their main set. Penetration in Scotland stood at 76% in the same year and at 75% in England.

Across the English regions, Londoners were least likely to have access to digital television in the home, with an average penetration level of 69% in 2006. Take-up was highest in the North East (at 79%) and the East of England, North West and Yorkshire & Humber (both at 78%) (Figure 2.24).

Figure 2.24 Digital television penetration, 2006

Proportion of homes (%)



Source: Ofcom communications tracking survey, 2006

Base: All adults with a television

2.3.2.6 Consumption

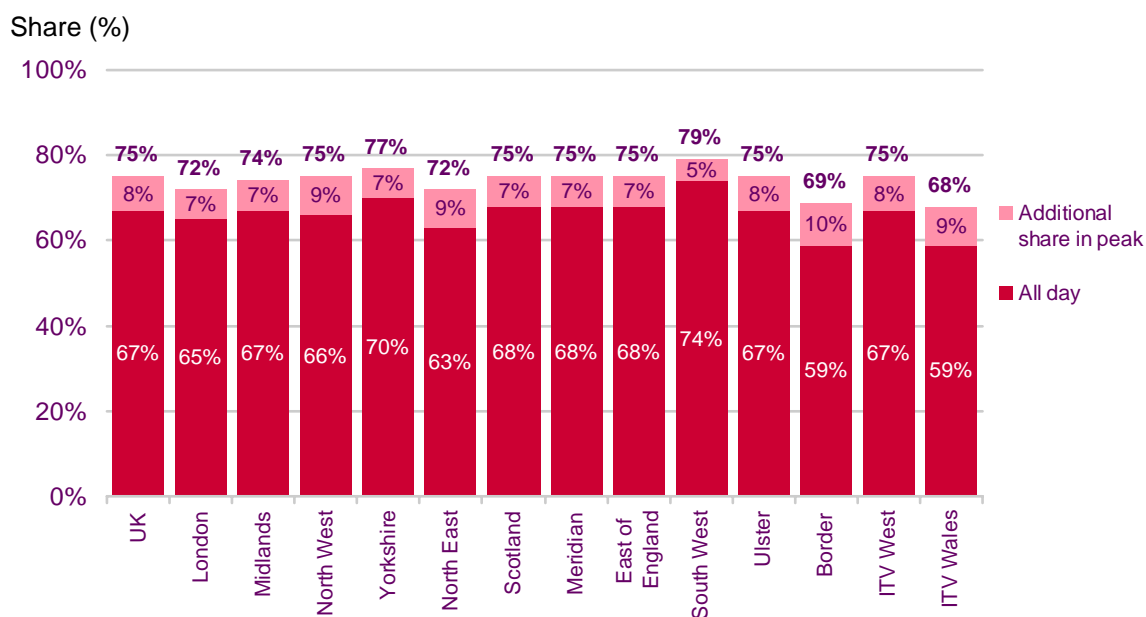
Viewers in the North East and Scotland the heaviest consumers of television in 2006

On a per-capita basis, people in the North East and Scotland watched the largest volumes of television in 2006, with 4.2 and 4.1 hours per person per day respectively. Viewers in the ITV West, London and UTV regions were the lightest consumers of television in the same year, with 3.3 hours. Hours per head of television viewing fell furthest in the UTV region – by nearly 12% between 2002 and 2006. Viewers in Scotland also watched less, by 8% over the same period. Consumption of television in the Meridian region rose by nearly 5% over the same period – the greatest increase nationwide.

All-television fifteen-minute consecutive weekly reach in 2006 averaged 92.8%, up by 0.5% on 2002. Reach was lowest in the London and UTV regions at 90.9% and 91.2% respectively, and highest in the East, North East of England and ITV West region at 93.9%, 93.8% and 93.8%. Across the five terrestrial networks, nationwide reach stood at 89% in 2006. The combined reach was highest among viewers in the South West of England (90%) and the North East of England (89%), and the five channels attracted their lowest reach in the London and ITV Wales regions (85% each).

In terms of share, digital-only channels put in their strongest performance in the Border and the ITV Wales regions, where they took 41% of all viewing hours in all homes. Share was smallest in the South West and in the Yorkshire television region at 28% and 30% respectively. Among the five terrestrial networks, BBC One's share lead exceeded that of ITV1 in all regions except UTV and Border. ITV1's lead over BBC One in the Border region was substantial, averaging eight percentage points in 2006; in the UTV region it was 2.2% in the same year (Figure 2.25).

Figure 2.25 Change in PSB share in all homes, 2002 - 2006



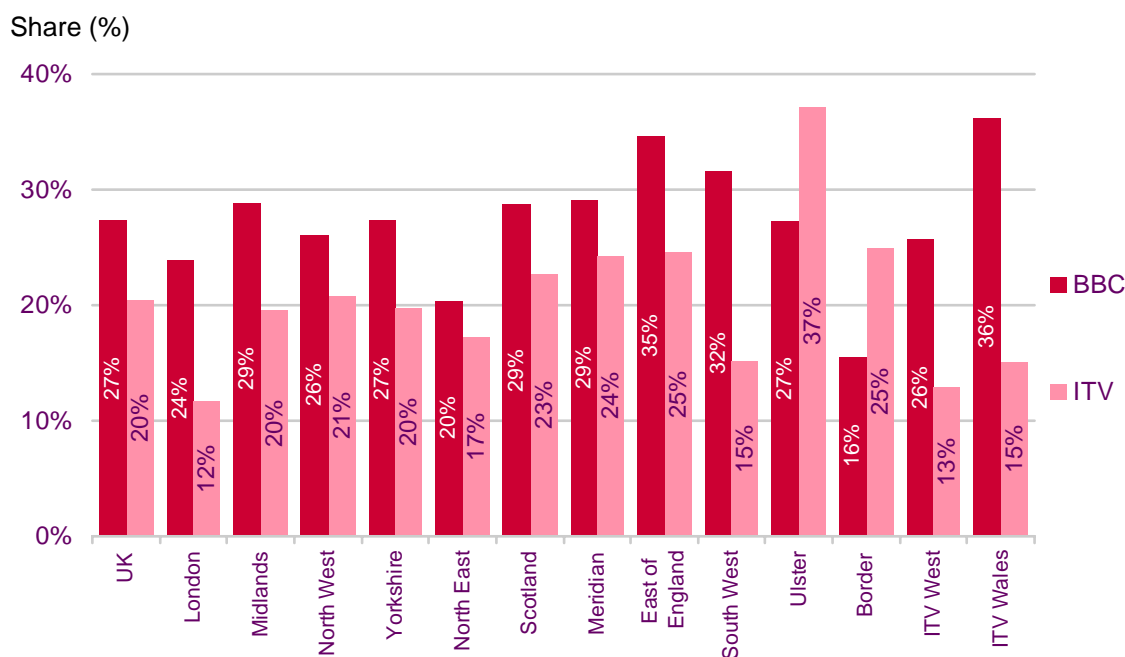
Source: BARB

An analysis of peak time viewing revealed a nationwide tendency to turn back to the five main networks in the evening. The average additional share that the networks attracted in peak time during 2006 stood at eight percentage points (on top of the all day share of 67%). This peak time ‘increment’ was highest in the Border region at ten percentage points (where all-day share was low in 2006) and lowest in the South West at 5% (where all-day share was high in the same year).

World Cup matches emerged as a popular choice for viewers in English regions in 2006. In all homes, they accounted for six of the top ten programmes viewed, while in the London region, they took eight out of the top ten slots. Viewers in Scotland and Northern Ireland did not turn to World Cup football in great numbers. Instead, soaps were a popular choice and in Scotland, local programmes such as *Still Game* and *Only an Excuse* took the top two slots for the most viewed programmes of 2006. In Northern Ireland *Coronation Street* and *Emmerdale* took the top two slots.

Local news bulletins were most popular with viewers in Northern Ireland in 2006. The BBC One and ITV1 early evening bulletins together attracted a combined share of 64%, compared to the UK-wide average of 47%; local news was also popular in the East of England, where it attracted a share of 60%. Viewers in London were the least likely to turn to local news, with *BBC London News* and *London Tonight* from ITV1 generating a combined share of just 36% in the same year (Figure 2.26).

Figure 2.26 ITV and BBC early evening regional news share, 2006



Source: BARB

Viewers in Scotland less likely rely on TV as a main source of national and local news

When asked about media sources for international, national and local news, responses varied by nation. People in Scotland were least likely to rely on the television for news about Scotland (though 59% did cite television, versus the national average of 68%); newspapers were a popular alternative medium. When questioned about media sources for local news, television was cited less frequently (46% nationwide) while newspapers emerged as an alternative (29% of responses). People in Northern Ireland were most likely to choose television, with 55% relying on it for local news. In Scotland they were least likely to rely on television, with just 45% citing it as their primary source of news.

2.3.2.7 Attitudes towards television

Across the UK, a majority of people surveyed by Ofcom's residential tracking study believed that the quality of television programmes in the UK had stayed the same. People in Scotland and Wales were most likely to hold this view (both at 57%), while those in Northern Ireland showed a greater tendency to believe that programme quality had declined over time (33% of respondents).

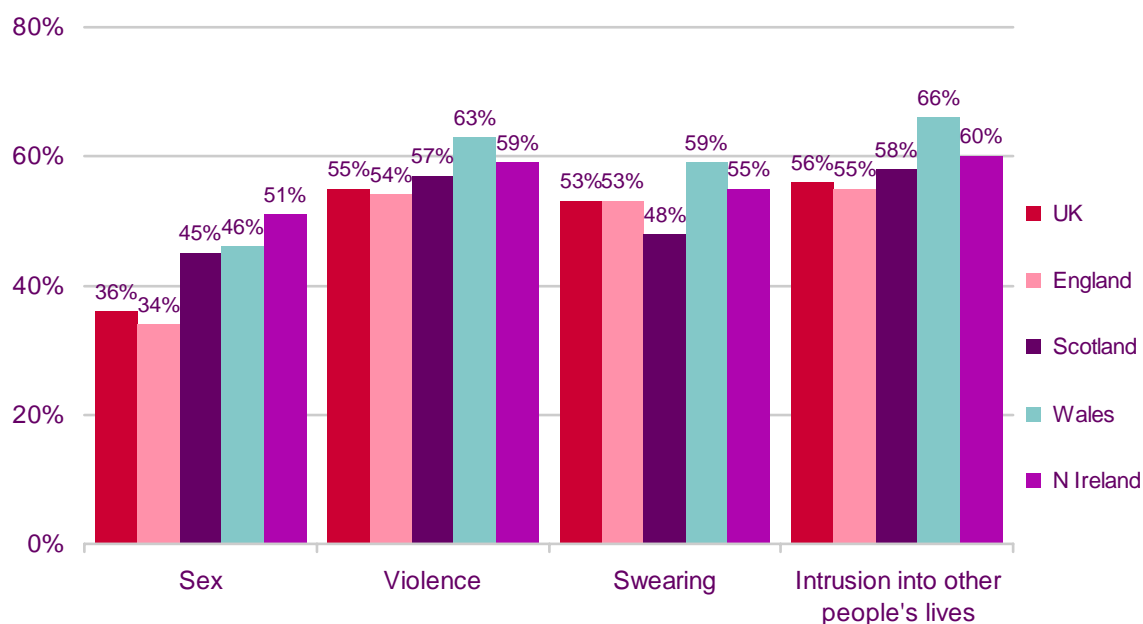
When asked about fair treatment on TV, viewers in Northern Ireland were most likely to agree that people and organisations were treated fairly (49% versus the UK average of 40%). People in Wales were most likely to believe that TV involved unfair treatment, with 29% of respondents to Ofcom's tracking survey holding that view.

People in Wales most likely to have concerns about violence and swearing on TV

On questions relating to the occurrence of violence, sex and swearing on television, people in Wales were most likely to have concerns about violence and swearing, while the volume of sex on television was more of a concern among viewers in Northern Ireland. People in Scotland were least likely to have concerns about volumes of swearing while sex and violence were of least concern to viewers in England (Figure 2.27).

Figure 2.27 Attitudes towards levels of sex, violence & swearing on TV, 2006

Proportion of respondent (%)



Source: Ofcom's residential tracking study

2.3.3 The radio market

2.3.3.1 The radio industry in the UK

310 local commercial stations in the UK plus 45 local services from the BBC

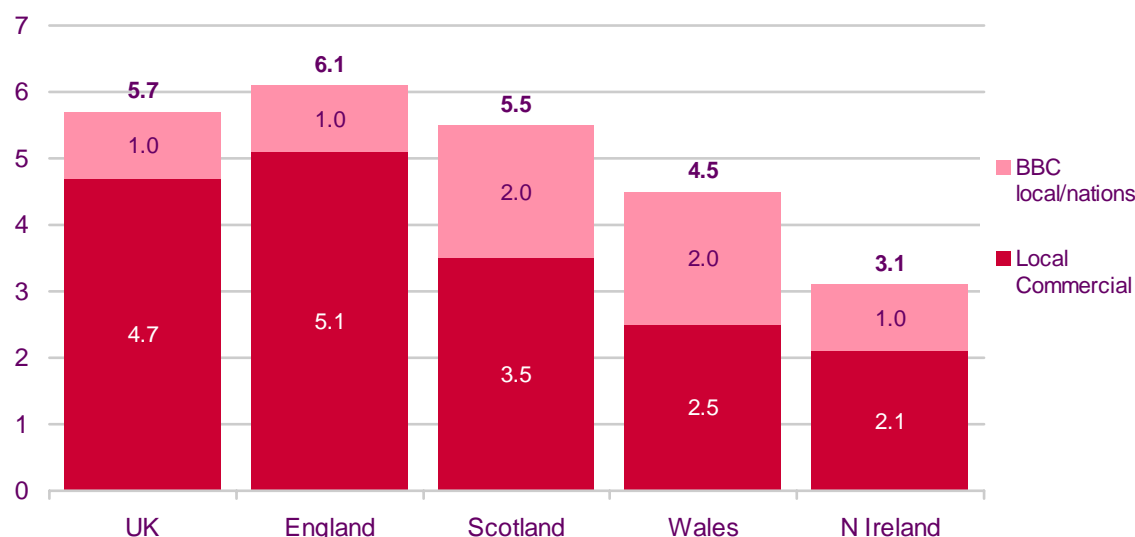
There are 310 local commercial radio stations available on analogue radio across the UK, with 51 BBC analogue stations, (including 5 UK-wide, 6 national and 40 local).

Of the commercial stations, 244 (79%) are broadcast out of England. Scotland has the next highest number of local commercial stations, with around 39 or 13% of the total. There are a further 17 commercial stations in Wales and 10 in Northern Ireland. The English regions are also served by 40 local radio stations from the BBC. Listeners in Scotland, Wales and Northern Ireland are served by their own BBC radio services (BBC Scotland, BBC Radio Wales, Radio Ulster and Radio Foyle). Listeners in Wales and Scotland also benefit from services in local languages (Radio Cymru in Wales and Radio nan Gaidheal in Scotland).

Choice of local radio stations varies across the nations and regions. The typical listener in England benefits from access to more local radio services than the other nations with an average choice of 6.1 local stations, comprising 5.1 commercial stations and a single BBC local radio station. This is explained partly by the larger populations covered by commercial licensees in England, resulting in more overlap between stations. Listeners in Scotland have access to an average 5.5 local services including 3.5 local commercial radio stations and two national BBC stations, (BBC Radio Scotland and BBC Radio nan Gaidheal). In Wales average choice is 4.5 stations (2.5 local commercial and two national BBC services; BBC Radio Wales and BBC Radio Cymru), while in Northern Ireland the equivalent figure is 3.1 stations, 2.1 local commercial and one BBC service, (one of either BBC Radio Ulster or BBC Radio Foyle) (Figure 2.28).

Figure 2.28 Choice of local analogue radio stations in the UK

Average number of radio stations per head



Source: Ofcom

Note: In addition to the above stations, there are five UK-wide BBC network stations and three UK-wide commercial stations available across England, Scotland, Wales and Northern Ireland.

BBC local or national radio spend highest in Wales at £7.07 per head ; lowest in England at £1.77

An analysis of the BBC's spend on the 40 English local radio services and national services for listeners in Scotland, Wales and Northern Ireland reveals that the UK-wide spend per head amounted to £2.40 per head in 2006. In terms of spend in the nations, listeners in Wales enjoyed the highest spend per head of population with an average of £7.07, partly due to the provision of Welsh language programming; investment in BBC Radios Ulster and Foyle came second at £6.77 and Scotland ranked third with £4.52. The equivalent figure in the English regions was £1.77 in the same year (Figure 2.29).

Figure 2.29 BBC investment in English local radio and stations for listeners in Scotland, Wales and Northern Ireland, 2005/06

BBC programme spend per head



Source: BBC Annual Report 2005/06 and annual reports for the nations and regions

UK local commercial radio revenue exceeded £500m in 2006

The revenue generated by commercial radio stations across the UK totalled £506m in 2006. The equivalent of 83% of local commercial revenues was generated from stations

broadcasting out of England, with Scotland taking an 11% share, Wales 4% and 2% from Northern Ireland.

Scotland generated the highest commercial radio revenue per capita, at almost £10 per person. This is partly explained by the great popularity of local commercial radio in Scotland (see consumption analysis later in this section). English stations' revenue per head ranked second with £7.81 (explained by the high proportion of all revenue generated by services broadcasting from England), while Wales and Northern Ireland stood at £6.69 and £6.66 respectively, driven by the greater popularity of BBC radio stations in those nations (Figure 2.30).

Figure 2.30 Commercial local radio revenue per head, 2006

Commercial radio revenue per capita 2006 (£ per capita)



Source: Ofcom/radio Operators 2006

Note: Chart shows net broadcasting revenues as based on returns received by Ofcom for the year 2006. The UK total also includes the UK-wide commercial stations: Classic FM, TalkSPORT, and Virgin 1215

Concentration of licence ownership by nation varies significantly

The share of radio licences held by the main commercial radio groups in each nation varies significantly. In Northern Ireland two groups, Northern Media and Emap, account for eight of the ten licences. In Wales, 76% of licences are in the hands of three groups; GCap, Town and Country and UTV. By comparison in England, GCap, The Local Radio Company and Emap hold around half (49%) of licences, while in Scotland four groups Emap, GMG, UTV and GCap together have a similar same share of 54% of all local commercial stations.

2.3.3.2 Radio services' availability

DAB coverage increases during 2006/07 as broadcasters install new transmitters

The operators of the two national DAB digital radio multiplexes have extended the reach of their networks with a programme of transmitter builds during 2006 and 2007.

The BBC DAB network was estimated to cover around 85% of the UK population by mid-2006, with the BBC announcing in September its plan to add a further 160 DAB transmitters in the coming years, with a stated aim of reaching 90% coverage in the medium term. Latest figures from Digital One estimate that its network covered around 88% of the UK by April 2007 and is expected to reach 90% with the addition of ten new transmitters as part of the next phase of network expansion.

There are currently eight UK commercial stations available on DAB radio on a nationwide basis (except in Northern Ireland where Digital One does not have a network presence) along with 11 BBC DAB stations that are available to the whole of the UK.

Northern Ireland has one local commercial DAB multiplex that offers access to 20 DAB stations, including the two national commercial stations Classic FM and Talk Sport. A further seven stations are available on the local DAB multiplex (Downtown Radio, Citybeat, Q102.9, Kiss and Cool FM).






In Scotland the choice of DAB stations ranges from 24 to 34 radio stations depending on location; this includes all 19 national DAB stations. Edinburgh and Glasgow listeners benefit from the widest choice, at 37 DAB stations including 18 stations available through local or regional multiplexes; listeners in the Ayrshire region have 34 stations. The equivalent figures for Aberdeen, Dundee/Perth and Inverness are 27, 26, and 24 respectively. In Wales, listeners in the Cardiff and Newport areas each have 36 stations; in Swansea the figure stands at 33 services.

In England listeners in London have the widest choice of DAB stations in the country (53), while listeners in some areas of England just have access to the 19 national DAB stations. Larger cities such as Birmingham, Liverpool, Sheffield, Leeds, Newcastle, Manchester and Bristol have access to 37-39 DAB services. Medium-size cities such as Leicester, Nottingham, Norwich, Plymouth and counties including Cornwall, Essex and Kent have access to around 27 services.

2.3.3.3 Radio listening

People in Wales were the most enthusiastic consumers of radio in 2006, clocking up an average 24.7 hours each per week. Listeners in the remaining nations were lower than Wales with Scotland and Northern Ireland at 23.2 and 23.0 hours per head respectively (Figure 2.31).

Figure 2.31 Radio reach and hours of weekly consumption of radio, 2006

	England	Scotland	Wales	Northern Ireland	UK TOTAL
					
Average weekly listening	23.4 hours	23.2 hours	24.7 hours	23.0 hours	23.5 hours
Reach	90.6%	89.4%	88.4%	90.7%	90.0%

Source: RAJAR, 2006

Scottish listeners reveal a preference for local commercial radio

The share of BBC and local commercial radio stations varies significantly across the UK, revealing different preferences among listeners by nation.

Local commercial radio is most popular in Scotland, where it attracted 43% of audience share of listening, compared to the UK-wide average of 32% and a share of just 24% in Wales. Around a third of all listener hours in England were to local commercial radio, while in Northern Ireland local commercial radio had a 27% share. Listening to local BBC radio was highest in Northern Ireland also at 27% – around three times higher than in Scotland where just 9% of listening was to local BBC services.

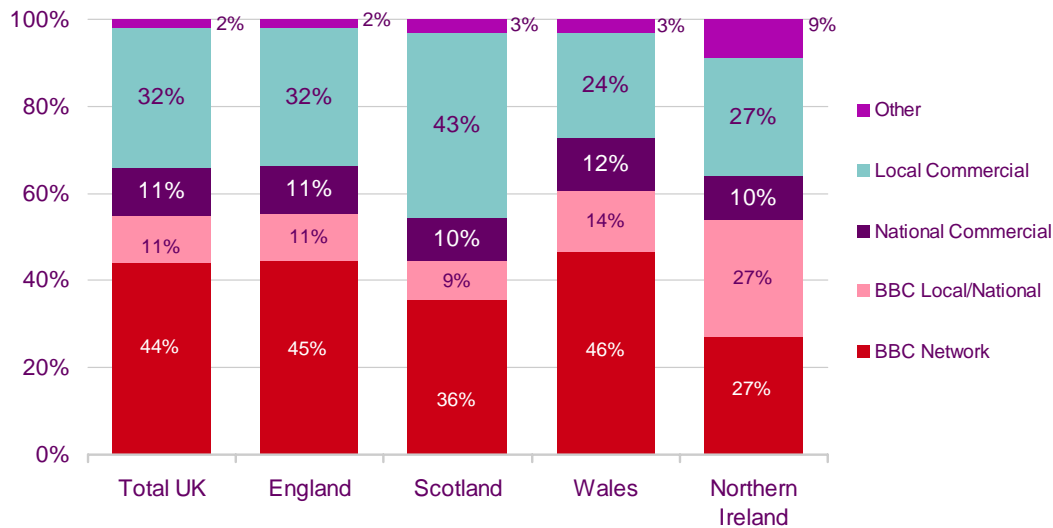
Networked (i.e. UK-wide) BBC radio was most popular in England and in Wales where it attracted 45% and 46% of share respectively; in Northern Ireland just over a quarter of

listening was accounted for by BBC network stations, while in Scotland networked radio took just over a third of all hours (36%).

Overall, listeners in Wales emerged as the most enthusiastic consumers of BBC radio, with 60% of all hours being devoted either to a national or a networked station. In England the equivalent figure was 56% and in Northern Ireland 54%, while in Scotland, just 45% of all hours were spent listening to the BBC (Figure 2.32).

Figure 2.32 Share of listening hours by nation

Share of listening (%)



Source: RAJAR

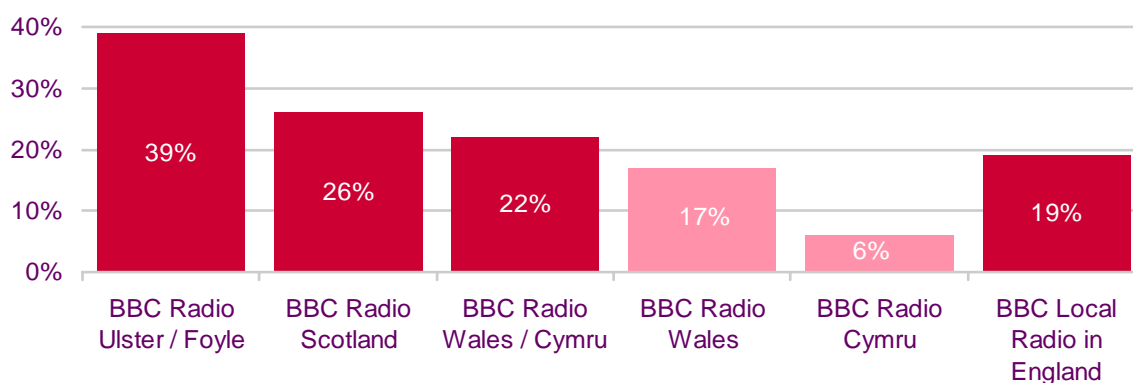
BBC local radio in the nations and regions

The BBC broadcasts 40 local radio stations in the English regions along with two services for the remaining UK nations. The stations for the nations comprise BBC Radio Wales and BBC Radio Cymru in Wales, BBC Radio Scotland and BBC Radio nan Gaidheal in Scotland, and BBC Radio Ulster and BBC Radio Foyle in Northern Ireland.

Of the nations' stations, BBC Radio Ulster/Foyle has the highest reach with 39% of adults (aged over 15) in Northern Ireland listening to the station on a weekly basis. The next most popular BBC radio service for the nations is BBC Radio Scotland, which 26% of adults listened to in 2006. BBC Radio Wales/Cymru combined reached 22% of the adult population, with Cymru reaching 6% of adults within this total (Figure 2.33).

Figure 2.33 Weekly reach of local and national BBC services

% of adult population reached per week



Source: RAJAR

2.3.4 Telecoms

2.3.4.1 Availability of fixed-line services

BT and Kingston Communications (the incumbent in Kingston upon Hull) provide the universal service obligation (USO) which makes access to a fixed line available to all UK households at a standardised charge, although additional connection charges apply in areas where installation is costly. The USO means that there are no significant issues regarding the availability of voice telephony and value-added services in the UK, although a small number of remote premises may have difficulty in connecting to the fixed network.

2.3.4.2 Availability of Internet services

Narrowband

As the only requirement to access narrowband internet services, apart from a suitably equipped computer, is a fixed line the availability of narrowband services mirrors that of fixed lines and narrowband internet is available across virtually all of the UK.

Broadband

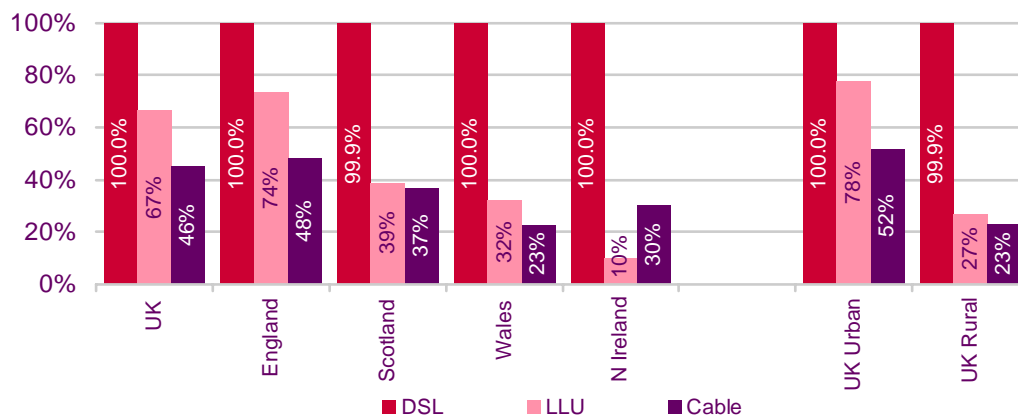
The two main technologies for supplying broadband in the UK are digital subscriber line (DSL) over a telephone line connected to a DSL or LLU-enabled local exchange or via cable modem over a cable operator's network. Figure 2.34 below shows the proportion of premises connected to a DSL or LLU-enabled BT exchange along with the proportion of households passed by cable infrastructure able to supply broadband.

LLU allows an operator to provide service by locating equipment in a BT or Kingston Communications local exchange, and those premises connected to an LLU-enabled exchange are likely to have access to a wider choice of DSL broadband and fixed-line services. Although satellite broadband and wireless broadband services are available in some parts of the country they make up less than 0.1% of UK broadband connections.

Almost all UK premises were connected to a DSL-enabled exchange at the end of 2006, although a small proportion of these are not able to receive service or may only be able to do so at limited downstream speeds (Figure 2.34). Across the UK two-thirds (67%) of premises were able to receive LLU-based DSL services, however, availability ranged from 10% in Northern Ireland to 74% in England. The availability of cable modem broadband services ranged from 23% of households in Wales to 48% in England, with an average of 46% across all of the UK. Availability of all services was higher in UK urban areas than in rural ones, with

people living in urban areas being more than twice as likely to be able to receive cable modem and LLU services than those in UK rural areas.

Figure 2.34 Proportion of premises connected to a DSL or LLU-enabled exchange or able to receive cable modem broadband



Source: Ofcom/operator data; December 2006
 Note: Cable broadband availability relates to households

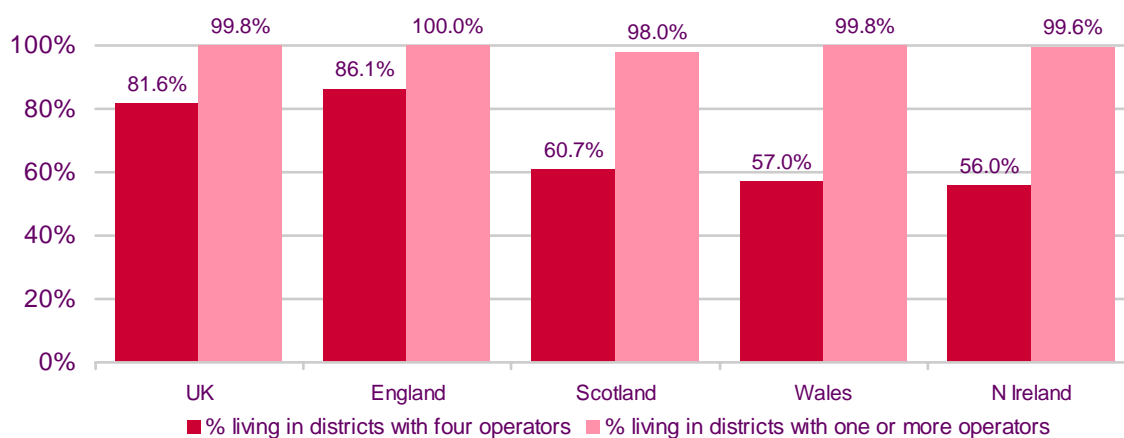
2.3.4.3 Availability of mobile telephony

2G mobile

Data obtained by Ofcom show that across the UK in Q1 2007 99.8% of people lived in a postcode district with at least 95% 2G mobile area coverage from one or more mobile networks, while 81.6% lived in a postcode district with similar coverage from all four 2G networks (Figure 2.35). There were wider variations in 2G mobile geographic coverage which are studied in Section 5 of this report. Population coverage by at least one 2G network was almost 100.0% in England, Wales, and Northern Ireland, while it was slightly lower in Scotland at 98.0%. Population coverage by all four 2G networks ranged from 56.0% in Northern Ireland to 86.1% in England.

Figure 2.35 2G mobile phone population coverage by postcode district

% of population

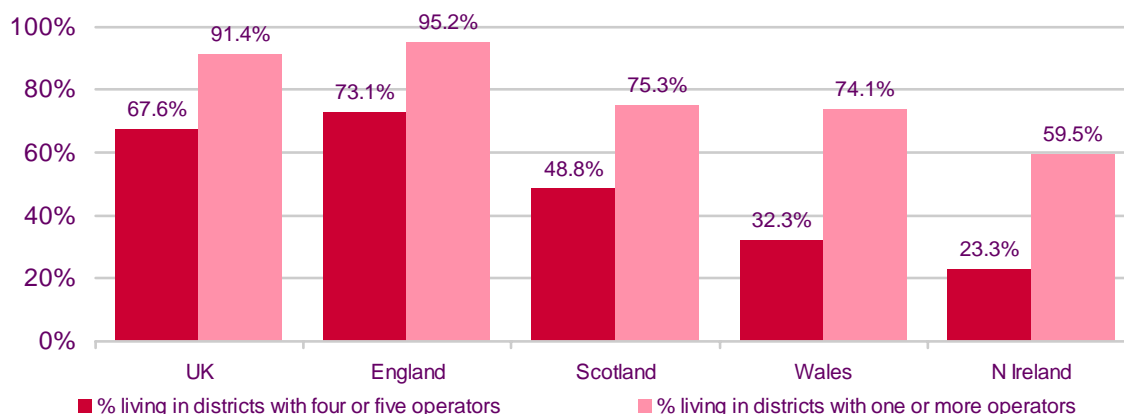


Source: GSM Association/Europa Technologies; Q1 2007
 Note: Figures show the percentage of population within postal districts where at least one operator or four 2G operators have at least 95% area coverage.

3G mobile

Similarly, data obtained by Ofcom show that across the UK 91.4% of people lived in a postcode district with at least 50% area 3G mobile coverage from one or more 3G mobile networks while 67.6% lived in a postcode district with coverage from four or five 3G networks (Figure 2.36). The proportion of people living in areas with 3G coverage increased by seven percentage points in the year to Q1 2007 as operators continued to rollout their 3G networks. Among the nations the proportion of people who have access to 3G services from at least one operator ranged from 59.5% in Northern Ireland to 95.2% in England.

Figure 2.36 3G mobile phone population coverage by postcode district



Source: GSM Association/Europa Technologies; Q1 2007

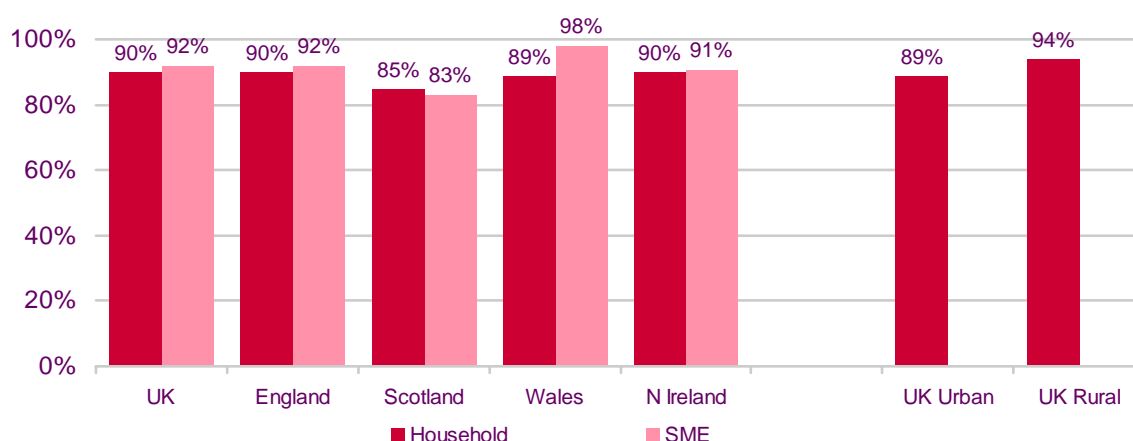
Note: Figures show the percentage of population within postal districts where at least one operator or four or five 3G operators have at least 50% area coverage.

2.3.4.4 UK take-up of fixed-line telephony

Fixed-line take-up was high across all of the UK, with on average 90% of individuals and 92% of SMEs reporting having a fixed line (Figure 2.37). Fixed line penetration among consumers was similar to the 91% of people indicated by Ofcom research conducted in 2005. Among both individuals (85%) and SMEs (83%), fixed line take-up was significantly lower than the UK average in Scotland, while SMEs in Wales (98%) were significantly more likely than average to have a fixed line. The survey also indicated that individuals living in rural areas were more likely to have a fixed line at home (94%) than those in urban areas (89%). Across the UK 2% of individuals cited an involuntary⁶ reason (i.e. one beyond their control, such as availability, cost or inability to use the required equipment) to explain why they did not have a fixed line at home.

⁶ Respondents were asked for their reasons for non-ownership. Where both voluntary and involuntary reasons were stated involuntary non-ownership is reported. This assumes that involuntary reasons take precedence over voluntary reasons (which may not always be the case). It should also be noted that some consumers may give 'voluntary' non-ownership reasons because they do not wish to discuss financial/affordability issues within research.

Figure 2.37 Fixed-line take-up

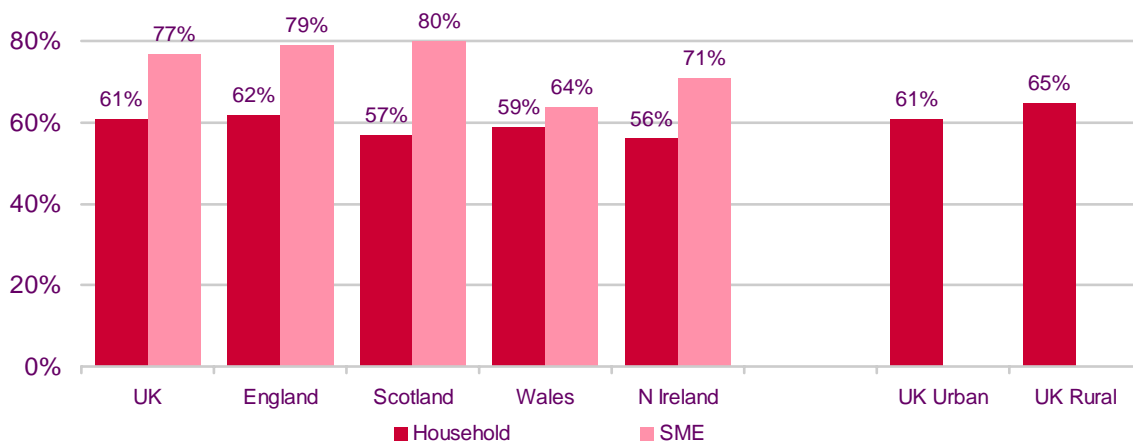


Base: All adults 15+/all SMEs
Source: Ofcom research 2006

2.3.4.5 UK take-up of internet

Across the UK 61% of individuals reported that they had a home internet connection while the survey also indicated that 77% of SMEs had an internet connection of some description (Figure 2.38). Figures from 2005 showed that 57% of households had an internet connection, indicating that household internet penetration is continuing to grow. There were no significant variations in household internet take-up across the UK except in rural areas (65%) where people were significantly more likely than average to have a home internet connection. The survey suggested that internet take-up among SMEs in Wales was lower (64%) than the UK average.

Figure 2.38 Internet take-up



Base: All adults 15+/all SMEs
Source: Ofcom research 2006

Broadband

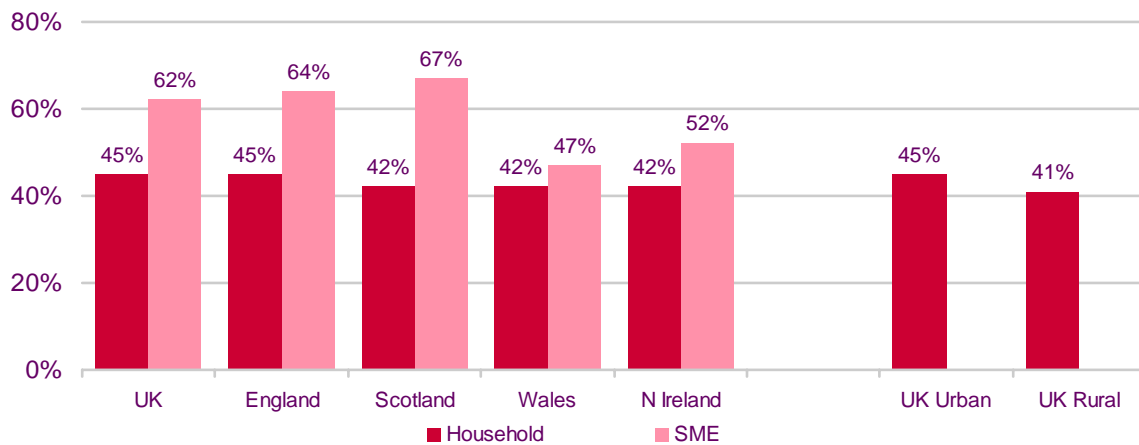
45% of individuals said that they had a home broadband connection and 62% of SMEs reported that they used broadband in 2006 (Figure 2.39). Research conducted in 2005 indicated that household broadband penetration was 35%, suggesting an increase in take-up of 10 percentage points during 2006. Broadband take-up levels were similar across the UK nations, with penetration of 45% in England and 42% in Scotland, Wales and Northern Ireland. The survey also indicated that people in rural areas (41%) were less likely to have broadband than those in urban areas, despite being more likely to have a home internet

connection. There were no differences from the UK average in broadband take-up among individuals in any of the nations or in urban and rural areas.

These figures are averaged over 2006 and the most recent available data (Q4 2006) show that 50% of households had an internet connection.

Among SMEs, broadband penetration appeared highest in Scotland (67%) and the only significant variation from the UK average was in Wales (47%) where SMEs were less likely to have broadband. The survey indicated that 2% of individuals did not have a broadband connection for one or more involuntary reasons, and that 57% of people using or intending to use narrowband internet connections were either certain, 'likely' or 'very likely' to get broadband in the future.

Figure 2.39 Broadband take-up



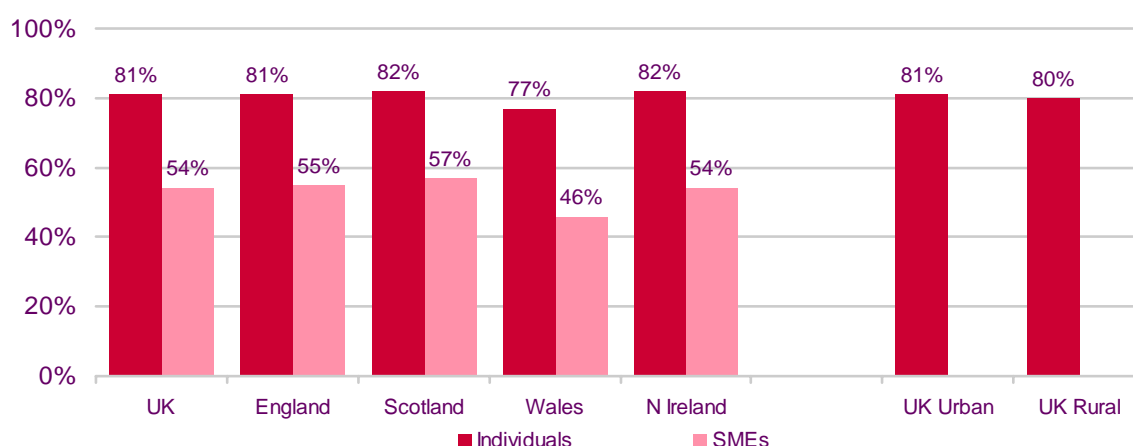
Base: All adults 15+/all SMEs
Source: Ofcom research 2006

2.3.4.6 UK take-up of mobile telephony

On average across the UK, 81% of UK adults and 54% of SMEs used mobiles (Figure 2.40). Use among individuals was high across all of the UK, with no significant variations from the UK average among any of the nations or in urban and rural areas except in South West England (76%), where use was lower than average. Among SMEs, take-up of mobile services was lower than the UK average in Wales and the South West of England (both 46%), while it was higher in Yorkshire and the Humber (63%).

Ofcom research conducted in 2005 indicated that that 80% of individuals used a mobile phone and that while mobile penetration among the under 45s age group in 2006 was similar to 2005 levels, take-up among those ages 45 and older had increased by four percentage points. Across the UK as a whole one per cent of individuals cited an involuntary reason (i.e. one beyond their control such as availability, cost or ability to use the service) to explain why they did not use a mobile phone.

Figure 2.40 Mobile use

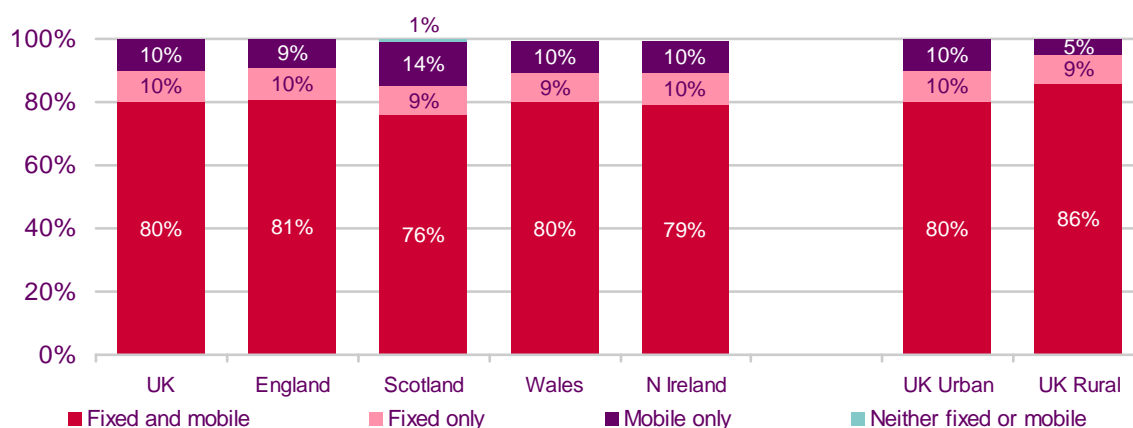


Base: All adults 15+/all SMEs
Source: Ofcom research 2006

2.3.4.7 Cross-ownership of telephony services

Across the UK 10% of individuals reported that they lived in a household where a mobile phone was the only form of telephony (Figure 2.41). The survey indicated that the proportion of people living in mobile-only households was highest in Scotland, where 14% did so. The proportion of people living in a household with a fixed line as its sole form of telephony was similar across all of the nations at around 10%. People living in UK rural areas were half as likely (5%) as those on urban areas (10%) to live in a mobile-only household, possibly due to lower-quality coverage in more remote areas.

Figure 2.41 Cross-ownership of household telephony services



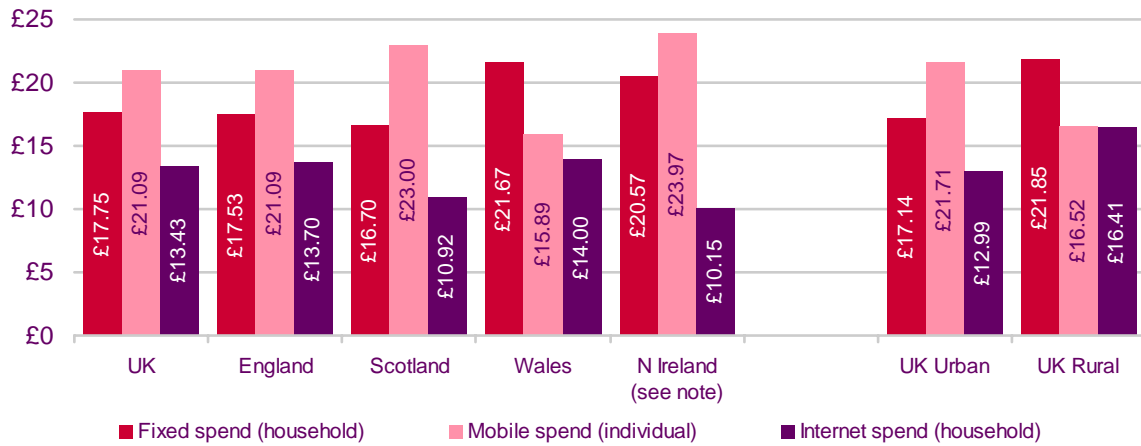
Base: All adults 15+
Source: Ofcom research 2006

2.3.4.8 UK consumption of telecoms services

From Ofcom consumer research data it is possible to calculate average claimed monthly household spend on telephony and internet services along with average individual monthly mobile spend (Figure 2.42). The survey suggested that, on average in 2006, UK households with a fixed line spent £17.75 a month on fixed line services and those with an internet connection spent £13.43 a month on internet services, while average monthly mobile spend by individuals was £21.09. Among the nations average household fixed-line and internet spend both appeared to be highest in Wales (£21.67 and £14.00 respectively) while

individual mobile spend appeared highest in Northern Ireland (£23.97), although this was with a small sample size. Average monthly fixed-line and internet spend appeared higher in rural areas than in urban ones, however, average monthly mobile spend was higher in urban areas (£21.71) than in rural areas (£16.52).

Figure 2.42 Average monthly telephony spend



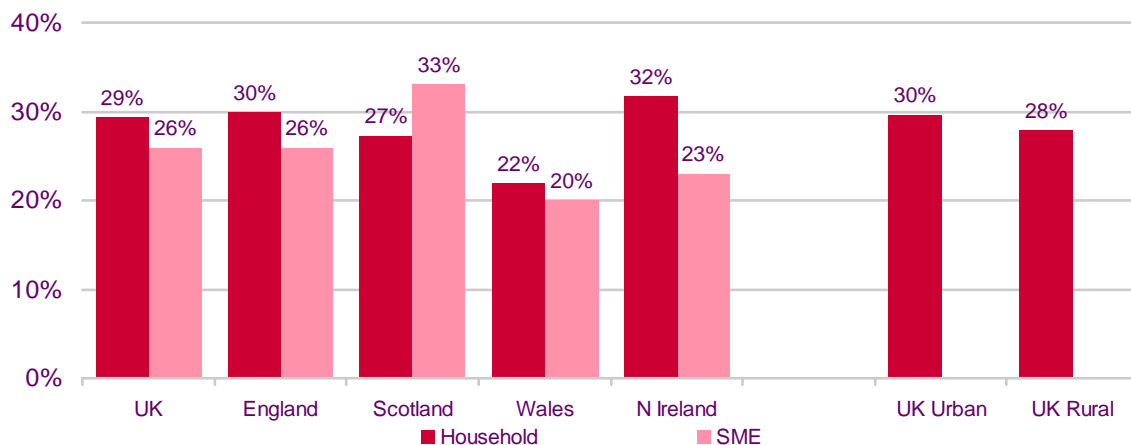
Base: All adults 15+ with fixed phone/with a mobile phone/with the internet at home

Source: Ofcom research Q1 2006

Note: Figures for Northern Ireland should be treated with caution due to a small sample size

Bundling of telecoms services has become an increasingly popular way for consumers to reduce their overall telecoms spend by taking advantage of the discounts offered by suppliers to customers taking more than one service from them. Ofcom research suggests that 29% of UK households and 26% of SMEs bought two or more telecoms services from the same operator in 2006 (Figure 2.43). Among residential users bundling of telecoms services was highest in Northern Ireland (32%) and lowest in Wales (22%), while among SMEs bundling was most prominent in Scotland (33%) and levels were, again, lowest in Wales at 20%. The bundling of telecoms services is growing as a result of both increasing broadband penetration and LLU availability.

Figure 2.43 Bundling of telecoms services



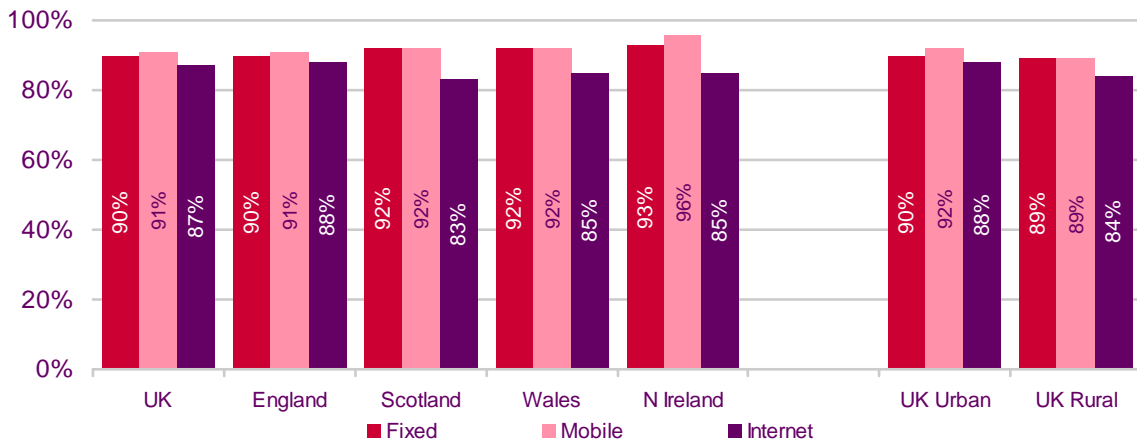
Base: All adults 15+/all SMEs

Source: Ofcom research 2006

2.3.4.9 Satisfaction with telecoms services

Across the UK the proportion of individuals who were either 'very' or 'fairly' satisfied with their overall fixed, mobile and internet services was high and satisfaction levels were similar among mobile (91%), fixed (90%) and internet (87%) users (Figure 2.44). The survey indicated that satisfaction levels for all three services were largely unchanged in 2006. Ofcom research also indicated that 35% of UK individuals with a fixed line had at some point switched supplier, while 36% of UK mobile users and 26% of broadband users had done so. Among SMEs, fixed and mobile switching levels were 59% and 40% respectively.

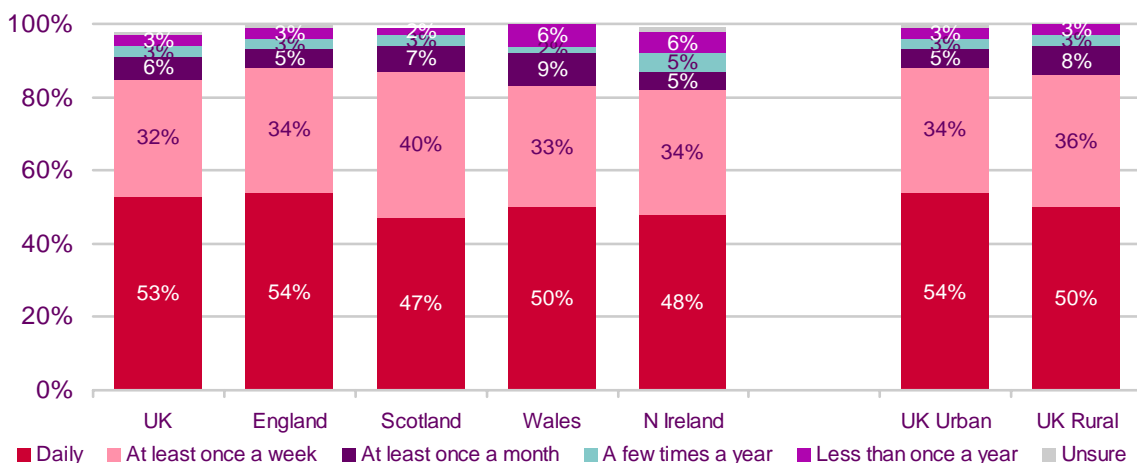
Figure 2.44 Overall satisfaction with telecoms services



Base: All adults 15+ with fixed phone/with a mobile phone/with the internet at home
Source: Ofcom research 2006

Figure 2.45 shows that across the UK more than half (53%) of internet users said that they accessed the internet at least daily, with daily internet use being highest in England (54%) and lowest in Scotland (47%). The proportion of people who accessed the internet at least daily was similar in UK urban areas (54%) to rural areas (50%), as was the proportion of internet users accessing the internet at least monthly (93% and 94% respectively).

Figure 2.45 Frequency of using internet at home, work or elsewhere



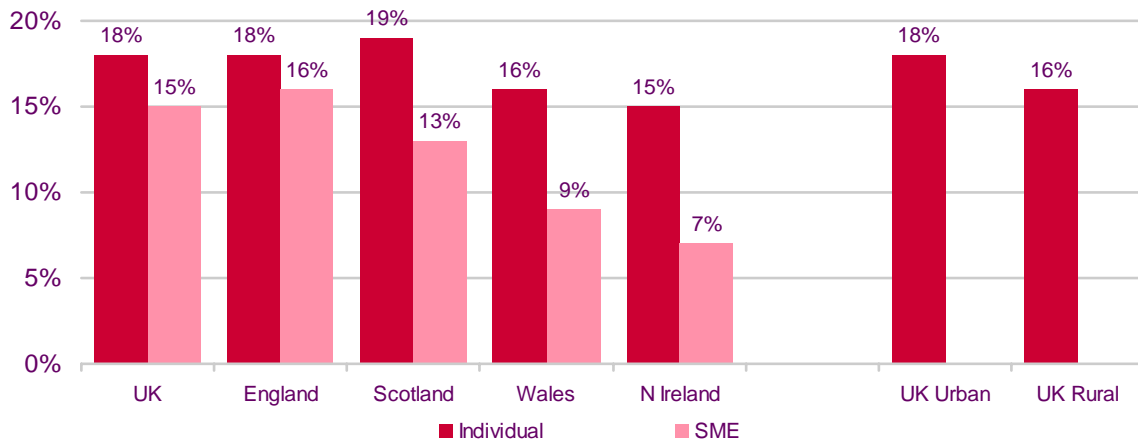
Base: All adults 15+ who use the internet
Source: Ofcom research 2006

2.3.4.10 Use of voice over IP services

Voice over Internet Protocol (VoIP) uses the internet to transfer voice communications, and typically VoIP providers are able to offer cheaper international call services than traditional fixed voice providers. Across the UK 18% of residential internet users said that they had at some point used a VoIP service, with use being highest in Scotland (19%) and lowest in Northern Ireland (15%) (Figure 2.46). The survey also indicated that similar proportions of residential internet users in urban and rural areas had used a VoIP service (18% and 16% respectively).

Ofcom research among SMEs suggested that across the UK 15% of SMEs had used a VoIP service, with use being highest in England (16%) and, again, lowest in Northern Ireland (7%). On average across the UK 28% of individuals and 23% of SMEs with an internet connection reported that they were either 'certain' or 'very' or 'fairly' likely to use VoIP services in the future.

Figure 2.46 Use of Voice over IP



Base: All adults 15+ who have access to the internet at home/all SMEs with an internet connection
Source: Ofcom research 2006